STORM DATA



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DIRECTOR NATIONAL CLIMATIC CENTER

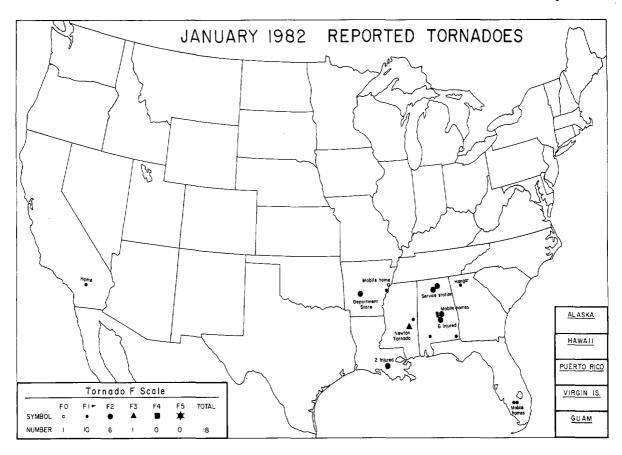
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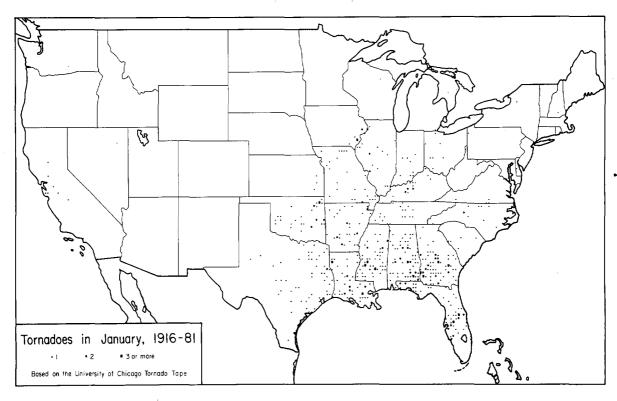
NOTE: The section on Outstanding Storms of the Month is prepared and edited by Professor T. Theodore Fujita. The narrative descriptions of Storms by State and Summaries of Hurricanes and Tropical Storms are prepared by the National Weather Service. The National Climatic Center compiles the statistics on deaths, injuries, and damage. This publication contains our best information on storms but, due to the difficulties inherent in collection of this type of data, it is not all-inclusive. Late Reports and Corrections will be carried quarterly.

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OUTSTANDING STORMS OF THE MONTH

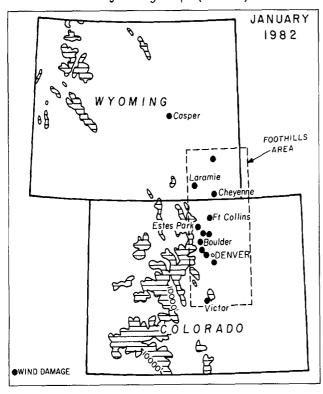


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● 1 <u>AL</u>	● 5 <u>CO</u>	● 10 <u>10</u>	● 15 <u>KY</u>	● 20 <u>MI</u>	● 25 <u>NE</u>	● 30 <u>NY</u> (0)	● 33 <u>0H</u>	• 37 <u>RI</u>	●41 <u>TX</u> (S)	●45 <u>WA</u>	O20HI
● 2 <u>AZ</u>	● 6 <u>CT</u>	●11 <u>IL</u>	■ 16 <u>LA</u>	● 21MN	●26 <u>NV</u>	● 30 <u>NY</u> (C)	■ 34 <u>0K</u>	●38 <u>5 C</u>	●41 <u>TX</u> (W)	●46 <u>₩¥</u>	●51 <u>P</u> F
3AR	→ 7 <u>DE</u>	● 12 <u>IN</u>	■ 17 <u>ME</u>	● 22 <u>MS</u>	■ 27NH	◆ 30 NY (W)	○35 <u>0R</u>	● 39 <u>5 D</u>	● 42 <u>UT</u>	●47 <u>₩1</u>	●52 <u>V</u>
● 4 <u>CA</u> (N)	● 8 <u>FL</u>	■ 13 <u>IA</u>	■ 18 <u>MD</u>	■ 23 <u>M0</u>	●28 <u>NJ</u>	● 31 <u>NC</u>	●36PA(E)	●40 <u>TN</u>	● 43 <u>VT</u>	●48 <u>₩</u> Υ	○53 <u>G1</u>
● 4 <u>CA</u> (S)	9 GA	14 KS	■ 19MA	● 24MT	● 29 <u>nm</u>	■ 32 <u>ND</u>	●36 <u>PA(</u> W)	Q41 <u>TX</u> (N)	●44 <u>VA</u>	●49 <u>AK</u>	



1. DAMAGING CHINOOK WINDS in Colorado and Wyoming in January, 1982

Damaging Chinook winds affected the Foothills area extending from southeastern Wyoming to Colorado Springs. The worst Chinooks were experienced on Sunday, the 17th and again on Sunday, the 24th. Distribution of damaging winds is shown in the Colorado-Wyoming map (below).

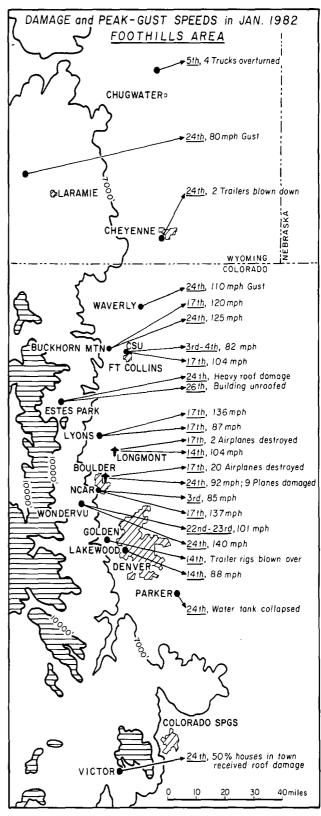


An unroofed house (F2 damage) below National Center for Atmospheric Research (NCAR), Boulder, Colorado. Photo on the 17th by Ed Zipser of NCAR (lower left).





Damaged roof and missing garage (F1 damage) seen at various locations in Boulder. Photo on the 17th by Dave Blanchard of ERL (upper right).

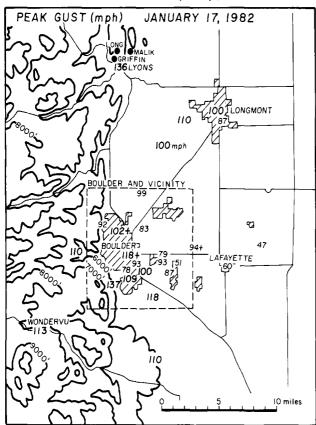


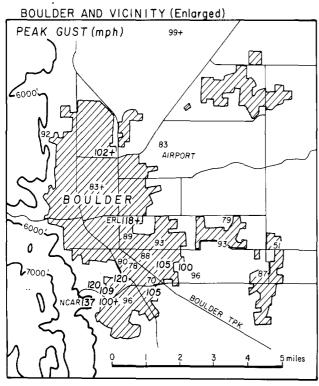
A summary map of the Chinook winds in January 1982, produced by using the data supplied by NWSFO's at Cheyenne, Wyoming and at Denver, Colorado. The 140 mph gust was reported from Wondervu while 137 mph gust was recorded at NCAR in Boulder.

- 4

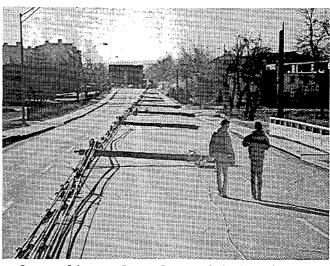
la. CHINOOK WIND on Sunday, January 17, 1982

Strong Chinook wind caused F1 to F2 damage in Boulder and vicinity, uprooting trees and damaging roofs. A gust-speed map below includes 15 reports of peak gusts in excess of 100 mph. A 118 mph gust was measured on the roof of the Environmental Research Laboratories (ERL), NOAA before power failure. See 118+ speed in the map.





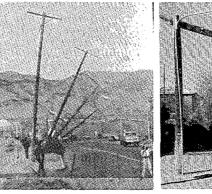
Peak-gust speeds on the 17th collected and mapped by Al Bedard of ERL and Ed Damaged p Zipser of NCAR. The lower map is an en-Holle of ER largement of the dashed area (upper map). ERL (left).



Power-line poles along 30th St. just west of ERL. Photo looking south by Harry Covey of ERL.



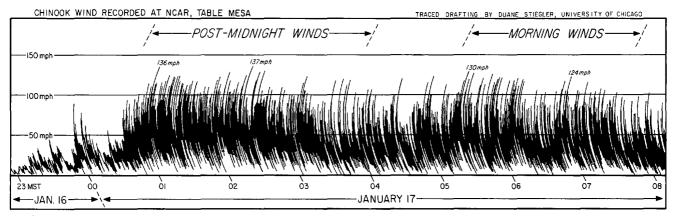
Although the exterior of the ERL office building was not damaged, some offices were disturbed by internal winds.



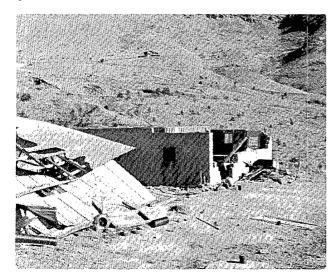
Damaged poles in Boulder. Photos by Ron Holle of ERL (right) and by Jose Meitin of ERL (left).

la. CHINOOK WIND on Sunday, January 17th ----continued

Wind gusts shown in this chart were measured by an anemometer on the roof of the NCAR building at Table Mesa, in southwest Boulder, 600 ft. above the city. The maximum peak gust of 137 mph occurred at 0220 MST during the period of the post-midnight winds. During the second high-wind period early in the morning, a 130 mph peak gust was recorded.

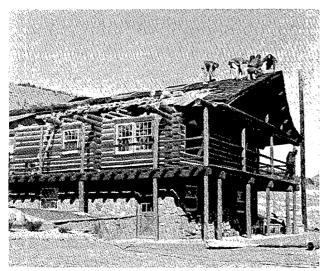


At Lyons, 15 miles north of Boulder, a number of houses and mobile homes were damaged. Four pictures shown below were supplied by Ms. Ada Lou Hammans of the Lyons Recorder through Phyllis O'Rourke of NCAR.

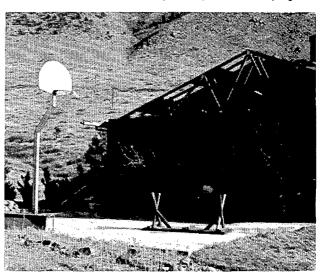




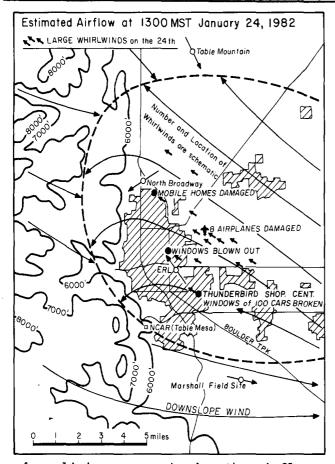
John Griffin's house in Lyons. Location of the house in the map on previous page.



Paul Malik's house being repaired after the roof damage.

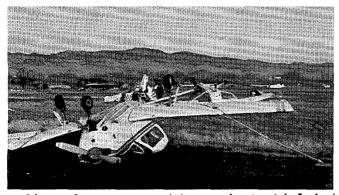


Ben Long's house was blown loose and the wall cracked.



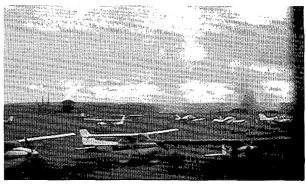
A preliminary map showing the airflow and whirlwind situations drawn on the basis of observational data collected by Ed Zipser of NCAR and Joe Golden and Al Bedard of ERL. For details contact NCAR and ERL.

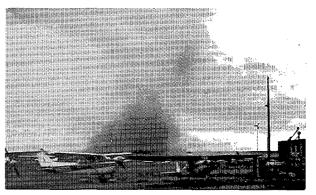


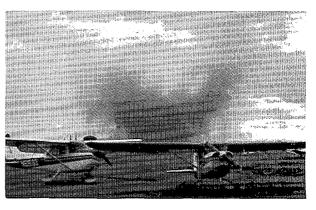


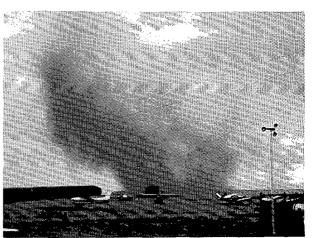
Aircraft overturned by a giant whirlwind which moved across the Boulder airport.

Large whirlwinds approaching the Boulder airport from the southeast. Photos below were taken from the airport looking southeast.

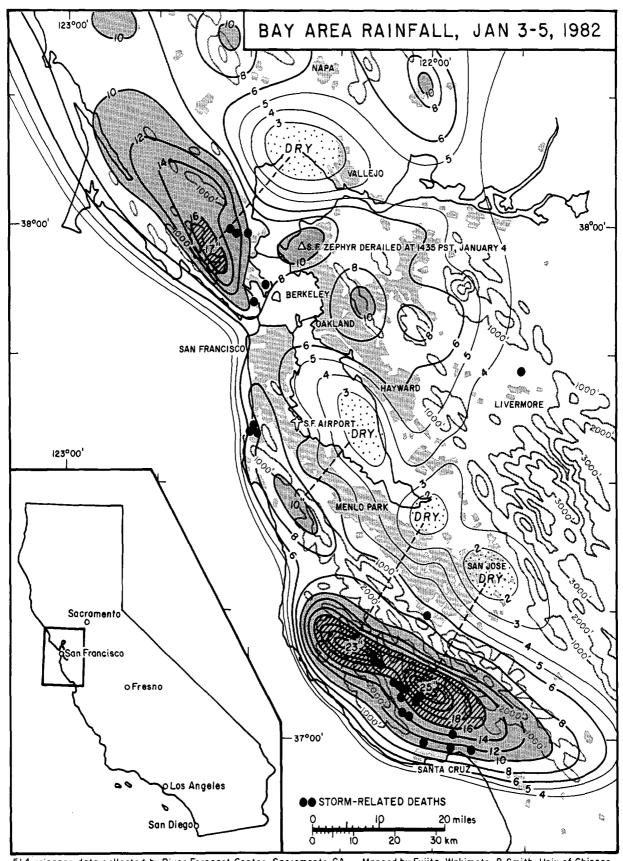








Pictures on this page were taken by J. Hutchinson, Manager of Western Flight Training, Boulder Municipal Airport.



514 raingage data collected by River Forecast Center, Sacramento, CA. Mapped by Fujita, Wakimoto, & Smith, Univ. of Chicago

During the rainstorm early in January, Marin and Santa Cruz Co. received up to 25 inch rainfall, resulting in numerous deaths and damage (see next page).



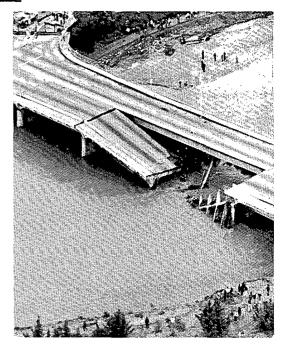




Three aerial photos of mud slides, a collapsed house, and a damaged bridge are courtesy of Mr. Pete Amos, The Santa Cruz Sentinel.

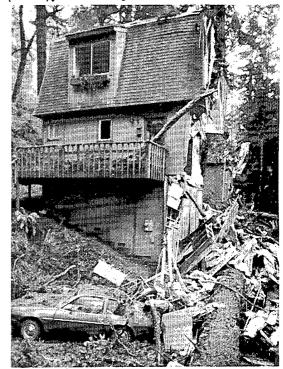


Landslide (shown with dots) which destroyed the house at Pacifica, killing 3 children. Photo by Mr. T Leslie Voud, U.S.G.S, Menlo Park, CA.



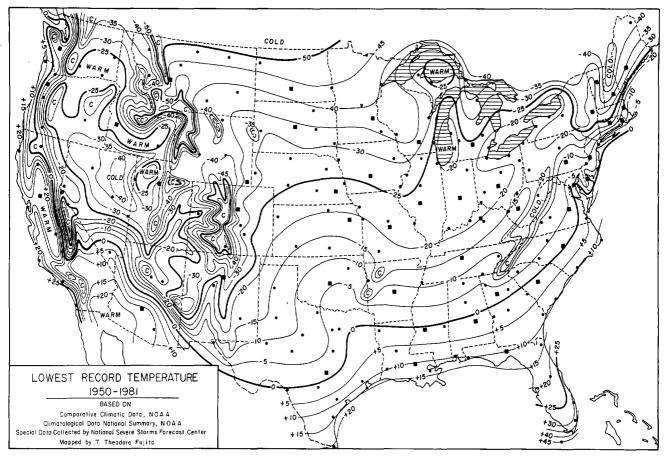


Buried car (above) and car on bank (left). Courtesy of Mr. Keith Kelsen

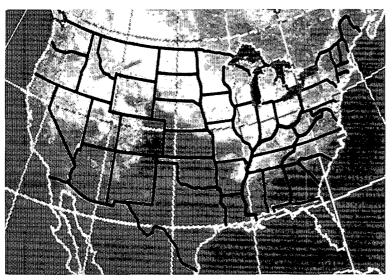


House sliced by tree. Courtesy of Mr. Don Coyro, Santa Cruz Sentinel

3. COLD WAVES in January, 1982



The above map shows the lowest temperature occurring before the record-breaking cold waves in January this year. The lowest temperature at Chicago (O'Hare Airport) was -26°F on Sunday, Jan. 10 and -25°F on the following Sunday, Jan. 17, 1982.

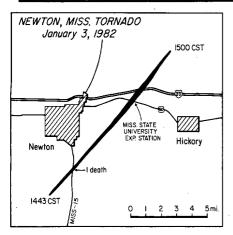




Minimum reflectivity photo of U.S. and southern Canada during 7 days between January 17 and 24 when the area was covered by deep snow after the record cold waves. This new photo produced by NESS shows the area of snow which remains white under the clear sky. Areas of water, either open or frozen, are shown as dark gray. A sudden warming in spring could cause rapid melting of the snow and ice seen in this photo, resulting in ice jams and floods (left).

A tropical garden in St. Petersburg, FL on Jan. 10 with hundreds of oil heaters ready to be ignited at sunset. Photo by T. Theodore Fujita (right).

4. Tornadoes in Mississippi and Alabama on January 3, 1982







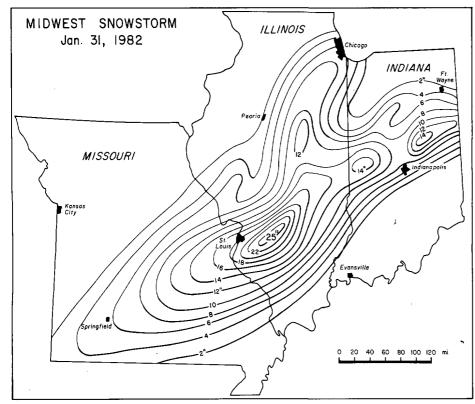
An F3 tornado near Newton, MS (see map) damaged a house at an Experiment Station (middle). Photo courtesy of The Meridian Star. An F2 tornado damaged a gas station (right). Photo courtesy of The Birmingham News.

5. THUNDERSTORM WIND in Georgia on January 4, 1982





Damaged airplanes at Warner Robins Air Park (left) and uprooted pecan trees in eastern Peach Co. (right). Photos by David Livingston, NWS at Macon, GA. supplied through John O. Laing, NWS at Atlanta, GA.



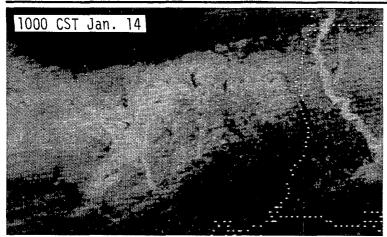
6. SNOWSTORM in Missouri, Illinois, and Indiana on January 31, 1982

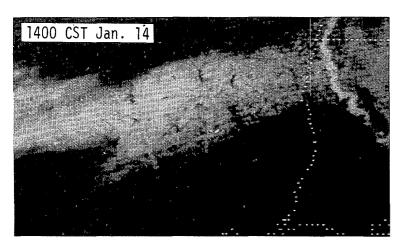
The town of Greenville, IL east of St. Louis, MO was paralyzed by the 25" snow on the last day on January.

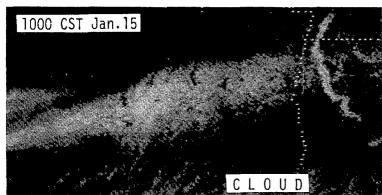
4,000 motorists were stranded for 2 days due to heavy snow and high winds.

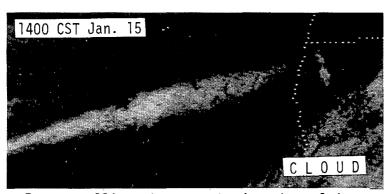
Snowfall data was supplied by NWS offices at St. Louis, Chicago, and Indianapolis.

7. SNOWSTORM in southern states on Jan. 12 - 14, 1982

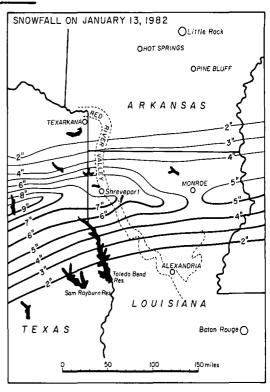




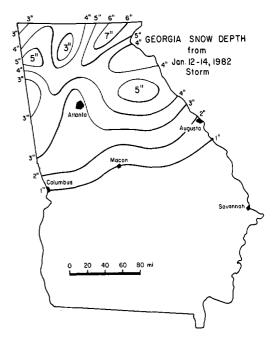




Four satellite pictures showing the melting of the Texas-Louisiana snow which occurred on Jan. 13. Dark spots in snow areas are lakes and resevoirs. Satellite photos were supplied by NESS office at Slidell, LA.



Snow-depth map on Jan. 13 produced by Ernest S. Ethridge, NWS at Shreveport, LA. The snow cover over the farmland along Red River appears as white bands in satellite pictures (left).



Two major snowstorms followed some of the coldest weather of the century. Snow-depth map was made by NWS at Atlanta, GA.

											JANUARY 1982
PLACE	TO THE TENSIONS OF ESTIMATED TO DAMAGE CHARACTER			LOCAL	JF PATH S)	PATH OS)	NO. PERS	ONS	STIMAT DAMAI		CHARACTER
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1 ALABAMA		ALABAN	ΛA								1
Lockhart area, Covington County	03 0910CST 0 0 4 0 Lightning A wood frame house was destroyed by a fire that resulted from a lightning strike.	Russell County	City	2120CST el cloud i accompani ing over.							Funnel cloud
North Alabama	03 All day Heavy rains produced by bands of thunderstorms moving across the area resulted in extensive flooding of small streams, roads and low areas. Some of the heaviest rains were in a band from around Vermon to Cullman and Pt. Payne and in another band from around Montevallo to Anniston.	Robinsonville area Escambia County	, 03 One min	2200CST worker wa or injurie . The 105 caused ad	s seri s when	stron	injure g wind g land	s toppl ed acro	othe eda esa	worko pump	ver oil truck
	Storm totals ranged up to 9.53 inches in Vernon. Many roads were damaged and many bridges, mainly on secondary roads, were washed out. Three to four houses were flooded at Sulligent in Lamar County and water entered some buildings in the Anniston area. Lamar, Cullman, Madison, Marshall, Morgan and DeKalb Counties appeared to be parti- cularly hard hit. The Park Ranger and his family	Walker County	and thu Som	2200CST mobile ho some stor nderstorm e trees we e downed.	mes we re-from winds ere blo	t wind swept	troyed ows we across	re shat Walker	tered Coun	ty.]
	were evacuated by helicopter from Bucks Pocket State Park as flood waters continued to rise and overland escape route was already blocked. One injury was attributed to the heavy rain when automobile left the road and overturned during a	Simcoe area, Cullman County	com	2240CST ervice sta pletely da aged when	ation, estroye	ed and	arket other	propert	obile y was	home exte	nsively
Verbena, Chilton County to southwest Coosa County	heavy thunderstorm at Hartselle in Morgan County. 03 1618CST 15 140 0 0 5 0 Tornado (F2) A tornado touched down just west of U.S. Highway 31 and moved northeastward across part of Verbena and the Lake Mitchell area to near Kelly Cross Roads in southwest Coosa County. A service station was destroyed in Verbena along with 4 mobile homes. At least one home was damaged. Several mobile homes were destroyed and some houses were damaged in the Lake Mitchell area. Several boats were elso destroyed. Damage in Coosa County was	Arab area, Marshall County	of uti and the cra and of dis	2245CSI ornado tou Arab and d lity lines blown offi house wer cking. Th a broken lumber. A appearance at least 2	iched of lamaged in the its if e awal ne hush collar odd:	lown ne d homes ne area foundat kened b nend su r bone 'ty of 'huge'	ar Hig , outb . One ion. y the ffered when h the st magno	hway 69 uilding house The cou sound c a cut it by a orm was lis tre	nort s, tr was uple t of the on th fall the e bel	heast nroof hat o roof e roof ie hea ing p compl	nd ed wned d dece ete
	extensive, there were no deaths or injuries. Residents of the mobile homes in Verbena had moved to shelter areas before the storm hit.	Gurley area, Madison County	Thr	2250CST ee people troyed one ley area.			when		storw		
Selma area, Dallas County Northern Autauga County to south- east Chilton Count	03 1702CST Funnel cloud Funnel cloud reported over Craig Field. 03 1722CST 8 80 0 6 5 0 Tornado (F2) This tornado apparently first touched down in the villy Hill Community along the Autauga Chilton County line and moved northeastward across	Blownt County	One a m min bui	2310CST person was obile home or wind da ldings was e of inten	in the mage to scatt	ne Moun to tree: ered ti	en thu t Hebr s, uti hrough	on Comm lity li out the	umity nes a coun	nds d . Mo nd ou ity as	stly t- a
	Interstate 65 into Verbena, where it merged with the path of the tornado that had hit Verbena at 4:18FM CST. Six people were injured in the Lily Hill Community where 1 home was completely swept sway and 2 others almost destroyed. Four of the injured were occupants of the home that was swept away and 3 of them were admitted to the hospital. One of the occupants landed on a truck that was parked outside the home. The others were apparently	Fyffe area, DeKalb County Monroeville, Monroe County	Thu 03 A s Two con	2320CST nderstorm 2345CST mall torna buildings cession st ctric powe	l ido bri i at a and at	40 lefly to lumber a near	0 ouched yard v rby pa:	equipm 0 down i were de rk was	4 n Mon stroy heavi	ned. 0 roevi ed an	da
	blown into am open field in front of the house. The tornado damaged buildings in Verbena. This storm forced rescue workers that were checking on damage from the 4:18FM tornado to take cover and not only was it the second tornado to strike Verbena in a little more than an hour, but was 1 of 3 that were on the ground in the area at about the same time. A second tornado crossed Inter- state 65 three miles to the south at almost the same time as this storm, while a third tornado touched down briefly just west of Clantom. These	Dothan area, Houston County	A so of dam tra dam tre before	1400CST mall torna U.S. 84 ne age, a dai iler was o aged and o e. Reside ore the st dows occur reported	do tou ar Cow ry bui vertur me com mts of orm hi	arts. Iding wanted. Supletely the months Dothar	own ear At lea was dar Severa y demoi obile l ad dama n and l	nst 15 maged, l mobil lished nomes h	homes and a e hom by a ad ta some	just had trace es wer fallinken st	roof tor re og nelter
Northeast Autauga County	Storms are described below. 03 1725CST 1 1/2 75 0 0 3 0 Tormado (F1) A small tormado crossed Interstate 65 about 3 miles south of the Verbena exit in northeast Autauga County. Some cars had minor damage but apparently escaped the full force of the storm that cut a path through the forest on both side of the highway as it moved northeast.	Statewide	of some	began on J t sent tem tral count south Alab of the co rippling i ing the ea	peraturies and by ldest ce and rly mo	res to d to le early morning snow s	belowess the mornings of the of the	zero o an 10 d ag of t the cen noved 1 12th a	ion o wer t egree he ll tury nto w	f arche nor s over th. I on the estern	rth and r most After 2 11th, 1 Alabama eastward
Clanton area, Chilton County	03 1730CST 0 4 4 0 Tornado (F1) A mobile home was destroyed and a house damaged by a mini tornado that briefly touched down about 1 1/2 miles west of downtown Clanton. Four persons were injured.		on to	the extrem tual halt ough busin	ely co especi esses	ally in	faces. north	Traff h and c	ic so entra ed ea	on car 1 Alai rly,	
. Statewide	O3 - Evening Thunderstorms O4 to early morning Following bands of thunderstorms that had already produced tormadoes over Central Alabama and flooding in the northern part, wind damage that ranged from minor to major was scattered throughout the state as another band of thunderstorms moved southeastward during the night. Reports of major damage follow.		many becar	task of re people. me impassa clogged w	In the	Birmir a shor	igham a rt time	area, w	here r rou	freewa	1398
Colbert Heights, Colbert County	03 2050CST Hail Spotter reported hail to baseball size. No demage reported.										

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ı	OCAL	PATH	ATH (NO. OF PERSONS		MATED [†] MAGE	CHARACTER			S a		PATH	HT*	NO. PER	OF SONS	ESTIMA DAM/		CHARACTER
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	PROPERTY	CROPS	OF STORM	PLACE	DATE	TIME - I	STANDARD	LENGTH OF I	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM
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	The ice tore as it accumu ages, that we became wides central sect tion continue of freezing	ated on uld lass read ov ons wer	expose t sever for the to harde no 12th	d surface al days i state but at hit. and gener	es. Po in some the n The pr	ower out- e areas, north and recipita- consisted	• [3 Miles South of Stuttgart, Arkansas County	gi ro ar	ainer of of d pea all a	rom a y and a con led ne torage	an equ crete arly l	half th	build storag e roof lled o	ing, e bui ing o ver a	shifte lding, ff the t anoti	d the destr home her ho	High Winds coyed a carport, on one farm. A ome site. One home
	the extreme r in parts of t to fall as ra morning and a snow storm has	orth an he extr in. Af arly af	d tempe eme sou ter som ternoon	ratures m th for th e improve of the l	noderat ne prec ement d .3th, a	ed enoughterion	n	8 Miles East-North- east of Marianna, Lee County	OS A ta	3 164 weak,	5CST short caused	0.2 -lived		0 do at ndow d	0 the Se	4 oudan l	0 Plan-	Tornado (FO)
	afternoon. It and travel ve situation became central a l to 4 inches The snow stor	ith man ry diff ame eve reas wh of sno m was f	toult, in more sere the w onto	already if not im critical second sthe ice.	withous spassab over t storm d	t heat ble, the the north humped		Helena, Phillips County	A wi le li We	severe nds ov ast or ne wir st Hel	ver mu ne of nds ca lena.	dersto ch of three used m	rm proc the are funnel cost dan estima	duced ea aro cloud mage a atea i	und He s touc long s nclude	gusty lena. hed do ind sou	At own br uth of 0,000	Tornado (FI) iefly. Straight Highway 49 near to a grain elevate crocery store, and
	arctic air the zero again over early morning south Alabama	er nort of the	h and c	entral Al nd into t	abama he tee	in the			fi sk we	fteen ylight re bro	thous t in P oken i	and do hillip	llars '	to equ ty Co elena.	ipment urthou	at the	he Joh d a wi	n Deere Co. The ndow in a bank
	In Birmingham began in the below zero tw 5th time on m The 18th brou improvement i and snow had At least 20	1880's ice in ecord t ght mod n condi left be	that th one win o have erating tions, b hind th	e tempera: ter and w. below zero temperati ut the arc eir grim :	ture d as onl to temp tures a ctic a statis	ropped y the eratures nd rapid ir, ice tics.		All of Arkansas	A st br fr br ez ws	eate or eaking roze an illding sperien s brie	g arct n Sund g low nd bur gs res nced t efly t es. T	ay, the temper st in ulting empore to low he color	numero in tr iry ele v to op ld forc	noved , resu in ma us hom emendo ctric erate ed man	lting ny are es, so us was power centra y sch	y over in re- as on chools ter dan outage al hea-	cord the 11 , busi mage. es. I ting s nd son	Unusual Cold th. Water pipes .nesses, and publi Several areas .lso, gas pressure .ystems in a numbe .e industries .l2th.
Red Bay.	were forced were damaged and 10 school damage to re Storm damage	into em with f ls were ads, fo was es	rozen w damage rests a	shelters ater pipe d. There nd agricu	s. 8,0 es. 25 e was a eltural	00 homes busines 1so exte interes	ses nsive its.	Hot Springs, Garland County	Or fo	ne dear	th was n his 2CST ike to	part: small 2,5	Lally d	ue to r with 0 d at t	the contract the last	old as butane 5 irgrow	a 77 heate 0 nds	year old man was er shut off. Tornado (F2)
Franklin County North and central Alabama	Police report demage report 23 0220CC Thumderstorn	ted mar ted. T rains	produce	d extensi	lve flo	ooding of	Flooding		sl we in	kippin all of obiles a re eceive	g type a Wal were sident	dama; -Mart tosse ial a: or dama	ge path Depart d about rea jus age. S	during ment S , stac t north	g its tore ked u heast tree	five collap p, and of th s were	minute sed. lover e depe	About ten auto- turned. Buildings artment store damaged or up-
2 A DIZONA	streams and	low are	gs duri	ag the mo	orning.			Hope, Hempstead County	2: W:	2 160 inds p smage	5CST roduce	d by	thunder	0 storm	0 cause	3 d mino	0 r	wrist fracture. High Winds
2 ARIZONA Phoenix Maricopa County	12 1630MST A severe lig \$150,000 dam natural gas	age to	a home		fire t	hat did	Lightning	Western Saline County	De	1617 puty S	Sherri	ff sav	/ large	funne	l clou	ıd near	r	Funnel Cloud
Tucson Pima County	21 Afterno Winds gustin and damaged	g to ov			power	Fines	Wind	4 CALIFORNI	IA,	Nor	ther	n						
Douglas, Sierra Vista Cochise County	21 Afterno Winds gustin house roofs, and trees.	on g to av	er 50 m	0 0 ph damaged	5 d mobi	0 le homes	Wind ,	Sierra Nevada Northern mountains Northern Sacramento Valley and SFO Bay area	sn	10 usty w ow in	the mo	ountāi		nches	of sn	ow nor	rthern	Winter Storm Sacramento valley
3 ARKANSAS	N							SFO Bay area Marin County Santa Cruz County Sierra Nevada	sn	20 stywi ow in to 5	the S' days.	ierra 28 to	he coas Nevada. 30 hou	st4 str	ended conti	feet o	e for mod	Winter Storm Mesoscale flood situation n fell over the
Salem, Fulton County	02 1000CST A shop buil destroyed i	ding an		nts were 1			Lightning						Cruz co					
Capps, Boone County	03 0930CST Lightning k Fire Associ to district	nocked a	adio to	Boone Cou		ura1	Lightning	4 CALIFORNI	. '		theri	n						
Ashley, Bradley, Jefferson, Lincoln, and Union Counties	reports of Wind damage County invo to outbuild down blocki one home. in Crossett north of Wa 3 miles nor County), so (southeaste as Camden i	ansas anigh win mainly lved a nings at mage road. Hail up tapered tren in th of Country the	nd moveends and in the mobile I many he so to go! d off to Bradle; rossett. Star Cin Countries C	d rapidly hail. No Hamburg in nome destr mes. A r king power f ball siz pea size y County. To miles ty (Lincol y). Small nty. Wine	eastwood hail to Cro royed number r line ze at e. Qu Marb s nort ln Cow l hail d dama	ard cause damage sett are at Hambu of trees, and deter sille size hof Pinnty), and also on ge was a set of the	High Winds/Hail Ing numerous was reported. ea of Ashley rg and damage s were blown smaging at least nning of the storm ze hail fell just hail was reported e Bluff (Jefferson d at Felsenthal curred as far west stimated near timber and power	Mono and Inyo Count San Diego County	20-	Two pro- rej of clo out Man eve Sar	oblems ported snow osed for t the mmoth ening n Dieg	in the 12 in the or seven month Airpon	ter sno ne Bish nches on e city, reral di caused t.	op, Ma f snow Road ays. S numer O ad Win	mmoth s and l s and l trong ous c	area. lammot school winds losure:	Hisho h 5 fe ls wer throu s at t	op eet e egh- che High Winds

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (TARDS) WILLED WOOPERTY CROPS	PLACE	TIME - LOCAL STANDARD OF ESTIMATED OF PATH (VARDS) WILLED OF PATH (VARDS) CHARACTER OF STORM OF PATH (VARDS) CHARACTER OF STORM OF PATH (VARDS) CHARACTER OF STORM OF
- CALIFOR	RNIA, Southern	COLORA	DO
Los Angeles, County	20 0100 PST 0 1 unk 0 Damaging Wind A freak wind storm stuck Hactendafeights, Storm about 24 miles EME of Los Angeles Airport or 16 miles ESE of Downtoom los Angeles. Storm moved from WSW to ENE, It riped roof shingles from 6 or 7 homesknocked down about 20 treessome up to 2 feet in diameter at ground level. Also blew down heavy air condit-		Other wind speeds recorded included 136 mph at Lyons, 20 miles north of Boulder; 120 mph at Buckhorn Mountain, west of Fort Collins; 113 at Wondervu, in the foothills southwest of Boulder; and 104 mph at CSU in Fort Collins. Damage estimates are not complete, but the total will be at least 10 million dollars in Boulder County, with relatively minor damage elsewhere along the foothills.
	ioning unit from foof of school. Path about 3 to 4 blocks long and about one street width. Substantial damage to power lines. One teenager injured as tree blown through bedroom window.	Northeastern Foothil	1s 22/23 0 0 0 0 High winds Wind gusts up to 101 mph were clocked at Wondervu; 60 to 80 mph gusts blew at several other spots in and near the foothills from Boulder to Fort Collins.
Riverside County	20 C205 PST 0 0 unk 0 Tornado (F1) A small tornado struck within Elverside City limits. Noise from storm described as loud humming sound swakened residents and funnel cloud was seen touching down by 2 eyesthresses. Damage was restricted to about 1 square block as storm moved west to east, One home severely damaged as large tree was blown into side of house. Nearby houses had roof damage and broken windows. No injuries and no dollar estimate of damage.	Northeastern Foothil	Fort Collins escaped the brunt of the windstorm a week earlier, but the city was hit hard this time. Winds of up to 140 mph blew in the foothills west of the city, with gusts of 80 to 100 mph in town. Several trailers were blown apart in the area, and at least two homes were completely unroofed. 15 to 20 power poles were snapped in two by the howling chinook. One man was hospitalized with a broken back after being blown off the roof of his home. Blowing dust in the area reduced visibility to near zero. At Horsetooth Reservoir west of town, seven boats were severely damaged.
Santa Barbara Count	20 1100 PST 0 0 0 0 Hail Hail reported on highway between San Earbara and Buellton (thru San Marcos Pass) causing several accidents.		Boulder escaped the worst effects of this windstorm, but nonetheless several hundred thousand dollars of damage occurred in the area. Nine more planes were damage at the airport, along with four mobile homes and many cars.
Santa Barbara Count;	y 20 1215 PST 0 0 0 0 Hail Hail I inch to 13/4, inch diameter reported in Santa Barbara and between Santa Barbara and Goleta. (reported by Skywarn Spotter)		Heavy roof damage was also reported in Estes Park. West of Denver, Gilpin County was buffeted by the storm; a school in Central City was partially wrecked. South of Denver, a water tank in Parker collapsed. The winds extended as far south as Victor, in the mountains west of Colorado Springs; 100 mph gusts there dislodged a home from its foundation and damaged roofs on nearly half the buildings in town. The strongest wind gust recorded was. 140 mph at Wondervu, a record for that normally windy spot. speeds reached 125 mph at Buckhorn Mountain, 110 at Maverly,
Northeastern	; 3/4 0 0 0 High Winds	Larimer County	north of Fort Collins, and 92 at Boulder. 26 0 0 4 0 High winds
Foothills	3/4 0 0 0 0 High Winds 85 mph winds were recorded in the Table Mesa section of Boulder. A gust of 82 mph was clocked at the Colorado State University Foothills campus west of Fort Collins. A few power failures were reported.	Mountains	A wind gust unroofed a building near Estes Park, causing \$7000 damage. Gusts were estimated at up to 100 mph during the day. 31 0 0 0 Heavy snow 8 to 15 inches of snow fell in many mountain areas. The snow was
Statewide	5/6 Snow fell over almost the entire state. Many mountain towns were really buried; Steamboat Springs received 23 inches of new snow in 24 hours, culminating a three week period during which 125 incnes of snow fell. 22 inches buried Crested Butte in 24 hours, with 12 to 20 inches at many other spots. During the blizzard, a bulldozer operator was killed when the machine he was driving fell into a ravine near Silverton. The snow hit cities at lower elevations too; 2 to 6 inches fell in Denver, Colorado Springs, and Grand Junction. When skies cleared, the mercury plummeted-to 27 below zero at Eagle, 30 below in Craig, and 50 below at Taylor Park, in a mountain valley north of Gunnison.	6 CONNECTIO	especially heavy in the foothills southwest of Pueblo, where schools were closed. CUT NONE REPORTED
Northeastern Foothills	14 0 4 4 0 High winds Chinook winds of up to 104 mph buffeted Boulder, tearing the roof off of a small apartment building. A gust of 88 mph was measured in Lakewood, with 60 to 80 mph gusts at other spots from Denver to Fort Collins. Four people sustained minor injuries during the windstorm, mostly from flying glass, though at least one person was knocked down by the gusts. Several tractor trailer rigs were blown over on interstate 70 near Golden, and	Newcastle County	3-4 Rain in advance of a cold front brought totals in excess of an inch-and-one-half, occurring from late on the 3rd into the morning of the 4th. Flooding affected three highways, especially at underpasses. Winds associated with the cold frontal passage gusted to around 40 mph on the morning of the 4that the time that a 200-ft long cinderblock wall, at a construction site, fell over.
Northeastern Foothill	One of the worst windstorms in many years hit the northeastern foothills, with Boulder bearing the brunt of the damage. Chinook winds began late on the night of the 16th and howled all morning on the 17th before abating in the afternoon. The peak gust recorded was 137 mph at 230 am on the 17th at the National Center for Atmospheric Research (NCAR), on a mesa just southwest of Boulder. 20 gusts of over 120 mph were clocked at NCAR between 1 and 9 am. An estimated 40 percent of all buildings in Boulder received at least minor damage; about 50 homes were damaged	Statewide	9- 10 0 0 Cold Outbreak 11 12 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18
	badly enough to be uninhabitable. The wind did some strange things. In one instance, a gust completely unroofed a home; the roof sailed over two adjacent houses and landed on a third. The Boulder airport was especially hard hit by the storm. About 20 small planes were	Northern	13 All Day 0 0 0 0 Snow Extensive snowstorm brought 4 to 6 inches of snow over the northern third of the state. To the south, snow changed to rain followind accumulations of 2 inches or less.
	especially and two others at the Longmont airport met a similar fate. Most injuries were caused by flying debris, but one woman broke her hip when she was blown out of her trailer. Utility poles were snapped in two, and about one seventh of the buildings in the area were without power. The wind also caused erosion damage to about 50 thousand acres of farmland in Boulder county.	Southern	14- 15 Another in a series of low pressure centers moved out of the south- eastern portion of the nation. This time the distribution of new snow was reversed. From 4 to 7 inches fell upon Kent and Sussex Counties, while lesser amounts (1 to 3 inches) fell over northern third, from afternoon of the 14th thru early morning of the 15th.

	NO. OF ESTIMATED DAMAGE	PESSONS DAMAGE
PLACE	TIME - LOCAL STANDARD STANDARD (MILES) WIDTH OF PATH (TARDS) WIDTH OF PATH (TARDS) PROPERTY PROPERTY OF CROPS CROP	DATE STANDARD OFF
DELAWA		GEORGIA
Statewide	16- 18 Severe cold gripped the region for the second straight weeken Frozen or broken water lines again were a problem as the merc dipped to 10 below zero at Greater Wilmington Airport on the ning of the 17th. This was a new record low for the month of the contraction of the large of the la	filled with tomato plents was demolished.
Southern	uary. breaking the old record of 6 below set in 1935. At Che sub-zero temperatures and wind made control of a large wareho fire difficult. Several firemen had to be treated for exposur following up to 12 hours in the fierce cold. 21 0 0 0 0 Snow Combination of a low moving out of the Ohio Valley and anothe off the mid-Atlantic coast brought 3 to 5 inches of snow to t southern half of the state. Snow began in the early morning a ended by early afternoon. In the northern half, 1 to 3 inche new snow was reported.	North Georgia 12- 12/aftn. 0 0 ? 0 Winter Storm 14 through 14/aftn. Two major winter storms struck the northern half of Georgia during the period 12-14 January. The storms followed some of the coldest weather of
8 FLORIDA		of the area with a combination of snow, sleet, and freezing rain. Travel quickly became hazardous; as highways became hopelessly clogged with traffic, thousands of motorists abandoned
Florida Peninsula	14 0200-1200 0 0 5 0 High Winds EST A strong cold front sweeping across the Florida Peninsula was accompanied by high winds and brief heavy rains. Sustained with up to 60 mph observed. There was widespread minor damage with up to 60 mph observed. There was widespread minor damage with downed power lines, large trees toppled, and numerous signs b over. Some roof damage was also reported along with damage appatio screens, carports, and tool sheds. Heaviest damage app to be along the Florida West Cosst where onshore winds were monly stronger, but produced high tides and some beach erosion The total damage is difficult to estimate. A rough estimate i between \$50,000 and \$100,000.	Georgia. This was followed on the morning of the 14th by a wide band of moderate to occasionally
Lee County	14 0910 EST 1.0 100 0 0 5 0 Tornado(FI) A tornado moved on a one mile track through Lehigh Acres(loca 15 miles east of Fort Myers). The tornado skipped over Lehigh Elementary School and the Homestead Shopping Center. Several houses sustained major damage. A mobil home was demolished an several more had heavy damage. Trees, power lines, and tool swere bloom_over_along the tornado path. Damage estimates were	10 IDAHO Benewah, Latah 23 0500 - 0 0 5 0 Heavy Snow, 1 Counties 1800 MST
Hendry County	around \$150,000. 14 1030 EST 0.3 25 0 0 4 0 Tornado(FO) A small tornado struck a mobile home park about 7 miles south Labelle. Two small mobile homes were destroyed and three sust damage. Total damage was estimated to be \$12,000.	Heavy snowfall and strong winds caused damage to several out- buildings and storage sheds. Near Moscow, Latah County, a 80 x 200 ft. steel building collapsed. The building, a horse arena used by many horseback riders, could not be rebuilt for \$150,000.
9 GEORGIA		11 ILLINOIS
Extreme northwest Georgia	O4 through early morning Thunderstorms dropped up to seven inches of rain in northwest Georgia, causing many small streams to overflow their banks and wash out a few bridges and secondary roads. Several mobile homes in Ellijay (Gilmer County) were flooded.	Entire state 9- 10 New minimum temperature records were set in many sections of the state as readings dropped to 27 degrees below zero in the north. The Dresden flood control ganear Joliet, Will County, froze sivit causing the Kankakee and Des Plaines Rivers to rise to flood stage. Moderate snow, main in the central portion, together with strong winds made trave nearly impossible. Many roads had to be closed in this area as power lines were blown down.
Clay County	A 4-year-old boy was swept away by rain-swollen Chattanooga Creek in Walker County. O3 2355EST 0 0 4 0 Wind	Rockford, Winnebagol 19 morning 0 0 3 0 Snow Heavy snow accumulated on a hotel roof which depressed a gas pipe. The repture caused a explosion and a fire.
Cherokee County	Thunderstorm winds damaged a shop building and a barn in the community of Suttons Corner. 04 0235EST 0.1 20 0 0 5 0 Tornado (F1	Southern half 30 0 7 ? Snow & Floor As much as 2 feet of snow fell in the south and central portions of the state closing many high- ways. About 4,000 persons were stranded for as much as 2 days
	A small tornado briefly touched down at the Canton Airport. The Cherokee County Civil Defense Director surveyed the damage and reported that a 55 x 85 foot hangar and two small airplanes parked in the hangar were heavily damaged.	highways. Sections of Illinois were without power due to the heavy snow and high winds. Some roofs collapsed due to the we of the snow. In Paris, Edgar County, 7 greenhouses were destructed when their roofs collapsed killing thousands of plants. In the extreme south as mush as 6 inches of rain caused river.
Peach and Houston Counties	04 0530EST 0 2 6 5 Wind Dozens of pecan trees were downed by strong thunderstorm winds in eastern Peach County near GA 96. Two minor injuries occurred when a mobile home was buffeted by the winds. Shortly thereafter these storms caused extensive damage at the Warner Robins Air Park near GA 96 south of Warner Robins. A tin hangar and 25 small sircraft parked in the hangar were heavily damaged. Several homes in the two counties were slightly damaged by the winds.	and creeks to rise above flood stage. The flooding of low-lying areas caused damage to buildings and 20 people were evacuated from their homes in West Frankfort, Franklin County, due to rising water. The snow and heavy rain ended on the 31st.

PLACE	TIME - LOCAL STANDARD CROPS CR	PLACE
12 INDIANA		IOWA
St. Joseph & Elkhart Counties	04 1030EST 0 0 3 0 Wind damage	All of Iowa 9 to Evening 3 0 7 0 Ground Blizzard 11 Morning 3 itter Cold
	Strong gradient winds increased from near sunrise - 68 mph wind reported at Elkhart Municipal Airport. Damage was to two television antenna towers.	Temperatures as low as 31 degrees below zero coupled with winds of 40 to 50 MPH produced wind chill factors of 60 to 90 degrees below zero. Visibility was reduced to zero by blowing and fitting snow. Drifts were as high as 15 feet in Allamakee County in extreme Northeast Iowa. All roads across Northern Iowa were closed as were many
Northern Indiana	09- 0700EST 1 70 5 0 Heavy snow blizzard conditions Total snowfall averaged 11-12 inches with isolated depths of 18 inches in LaPorte and North St. Joseph Counties. There were numerous traffic accidents. One death occurred - an elderly man ventured away from his home in Kosciusko County, became disorientated and died of hypothermia. Over 50 cases of frostbite were reported due to windchill of 60 to	across Southern Iowa. Countless automobiles were in ditches. Notorists by the hundreds were stranded at Truck Stop, restaurants farmhouses and in buildings provided by numerous towns and villages Highway Patrol troopers end Sheriffs' beguties transported stranded drivers to places of shelter. A rural Kellogg farmer died of exposure after he walked 1 1/2 miles through the sub-zero weather to the home of his parents. He collapsed upon reaching the home. The parents were unable to take him to the hospital because roads in the area had drifted shut. An Akron man was found dead, the victim of exposure, in his stalled car on Iowa Highway 3 mear the Plymouth County town. His car was mired in deep drifts on the Highway. Another man was found dead from exposure in his frozen cabin near Preston in Jackson County. Almost all schools across the State cancelled classes on Monday, the 11th, due to continued bitter cold
South Central	65 degrees below zero.	temperatures and hazardous driving conditions. A number of hogs perished from suffocation when they crowded together to seek warmth
Indiana	13 1200EST 0 0 0 0 Heavy snow Four to six inches of snow fell over- night. Main counties affected were Sullivan, Clay, Greene, Owen, Monroe, Brown, and Lawrence.	All of Iowa 15 Morning 3 0 6 0 Ground Blizzard, 16 Morning Freezing Rain, Bitter Cold A second consecutive weekend winter storm struck Northwest Iowa on an early Friday morning and spread southeast across the State during
Northern Third of State	15- 0 0 0 0 Blizzard 16	the day. The Eastern half of the State received freezing-rain preceding the arrival of snow, strong winds and bitterly cold temperatures. Rople, with fresh memories of the ground blizard of the past weekend, heeded advice to take precautionary measures and not travel unless absolutely necessary. This resulted in very few
	A mixture of sleet, snow, and high wind struck the northern third of the state. Two to four inches of snow with bitterly cold temperatures occurred. Wind chill readings were in the -60°F. range. Blowing snow frequently reduced visibilities to less than ½ mile. Interstate 65 as well as state and county roads were closed to all traffic due to drifting snow.	stranded travelers and vehicle-free roads which aided road maintenance crews. Food stores were swamped with people stocking up on food to "ride-out" the storm. Only 1 to 2 inches of new snow fell but winds of 50-60 MPH picked up this new snow plus snow already on the ground and reduced visibility to near zero, aninly in rural areas, and produced 10 foot drifts. Wind chill figures were 50 to 80 degrees below zero. Over two dozen farm homes were isolated in Southwest Iowa. Several semis skidded off I-80 west of Des Moines. I-35 was closed to northbound traffic from Ames to the Minnesota border. The body of a 34-year old man was found in a cornfield 6 miles west of Kensett (Worth County). The man, a victim of ex-
Northeast and Central Indiana	23 1000EST 0 4 0 0 Ice Freezing rain produced extremely icy roads. All bus service was halted in Indianapolis due to road conditions.	posure, died while walking from I-35, a mile to the east, after his, car became stuck in snow. A second exposure victim was a man in Dubuque whose frozen body was found in a downtown alley in 23 degree below zero cold. An 84-year old woman also died of exposure after she wandered from a SiouxRapidanursing home, clad only in a dress, sweater, and shoes. The wind chill was 64 degrees below zero. There was a substantial loss in livestock, mainly hogs that were
North + Central	23- Other 31 Roofs on buildings collapsed in Indianapolis and Muncie due to the weight of the snow and ice. Some had over two feet of snow on the roof.	out-of-doors. All of Iowa 21 Evening 0 0 6 0 Blizzard, Heavy 24 Morning Snow, Glaze A winter storm struck Iowa for the third weekend in a row. Rain and freezing rain began over Southwest Iowa the evening of the 21st and
Northeast Indiana	31 Heavy snow - 8 to 14 inches in depth. Heavy snow	spread northeast. This was the beginning of a prolonged period of adverse and diverse weather for Iowa. Heavy snow fell over the Nord where over a foot of new snow was common. Fourteen inches fell at Mason City and Sloux City received 18 inches. Strong winds blew the snow into drifts of 15 to 20 feet and reduced visibility to
Southern Indiana	22- 0 0 0 0 Flooding 23 Heavy rain heavily saturated the soil and poor drainage caused flooding in the low areas, especially urban. Some highways were closed. Small creeks were flooded and large creeks were bankfull.	zero. Southern Iowa was covered with a thick layer of ice. Many schools throughout the State either didn't open the morning of the 22nd or closed early because of the treacherous driving conditions. Officials closed all roads in the extreme Northwest Counties as driving was impossible on the 22nd. Residents were advised to stay at home. Numerous highways were closed in Northeast Iowa when wind gusting to more than 50 miles per hour caused severe drifting. A number of vehicles were abandoned when motorists attempted to drive through drifted over roads and became stuck. The weight of the snow and ice caused a roof to collapse on a wooden quonset-type roller rink at Hedrick (Keokuk County). Forty persons, skating at the time, escaped injury by evacuating the building after hearing loud prices and easing at the hearing and the prices and easing at the hearing and the prices and easing at the hearing loud prices and easing at the loud prices and easing at the loud prices and easing at the latest and the loud prices and easing at the latest and la
13 IOWA		loud noises and seeing six inch nails dropping to the floor. Roofs of poultry houses and cattle sheds collapsed under the weight of heavy snow in Northern Iowa killing numerous chickens and cattle.
South and East Iowa	01100- 02 1700CST 0 0 4 0 Heavy Snow, the area of snow entered Southwest Lowa shortly after Midnight moved northeast across the State. Four-inch snowfall was come with Central and North-Central Iowa receiving 6 to 8 inches. Snow was followed by freezing rain over Southern Iowa which can widespread glaze.	nd n l 14 KANSAS NONE REPORTED
Statewide Except for far Northwest Iowa	3-4 Q800- Q900CST Four to eight inches of snow fell over most of the State. St northerly winds whipped the snow into near blizzard condition closing many highways in Eastern and Southern Iowa. All high in Appanoose County were closed due to zero visibility. Near schools were closed over the Eastern half of the State on the as were many businesses and factories. A mixture of snow sl and freezing rain fell on top of a heavy layerf ice over a w area of Southeast Iowa and caused numerous "fender-bender" ac	ng ys all th t e

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15 KENTUCKY									 -	LOUISIAN	A										
South Central and Southeast Kentucky	3-4 Moderate floo South Central	oding oc	curred utheast	as 1	0 v to 2 i	inche	s of ra	Flash Flooding in fell over id slides			The sno	turned northe w with	to si rn tie the mo	now in er of post (1:	the no parish	orth es re es) i	hal: cei all:	f Tue: ved 4 ing a:	e state Tuesda sday night. to 6 inches o t Hanna, about		
Eastern Kentucky	power outages 4 Scattered reg In Lackey Ker broke windows At Beaver Lak loose causing	orts of stucky (and to se Resor	damage Floyd C re away t (near	O e due County y a to r Mont	0 to hig) gust p sect icello	3 gh wii s sti sion i	2 nds wer riped a of a st boat do	High Winds re received. way siding, core front. ock broke			mer the	w were hes rep Bogalus Sleet, cial trually state.	report orted a. snow, anspoi non~ei Hund	and firtation	r centrorth of reezing and to for the centrol of th	tral of a g rai privation	Lou: line in a: vate 24	isiana e from 11 bu auto houra	amounts of a with 1 to 2 m Lake Charles t halted com- traffic was s throughout ccurred on ice		
Statewide	 10-11 Winds gusting below brought	to 40Ml wind cl	PH with	4 temp	20 eratur he 50	UNK es fi to 70	UNK rom 10 O below	Cold Wave to 15 degrees freezing			haz pro	ards. blems f	dition The he or hos	eavy d: spital:	rain o	n wat publ:	ic w	syster ater :	creating fire ms caused systems as in thousands		
Statewide	range. Sever accidents. 16-17			0	10	UNK	Unk	Cold Wave			of of or	homes. their c	Elec ustome duri	tric poers suing the	wer coffered four-	ompai loss day j	nies s of peri	esti powe: od. Na	mate that 90% r at one time atural gas		
	falling between 22 a to 4 inches	of rain	15 be 1 fell eams.	0 over: Seven	ero. 2 24 hou al peo	4 irs w	4 ith a g	ercury readings Flooding eneral flooding be rescued from			Low fact the out the How	water provides a state. Sut was crop dam non-grower, su	ressumed but An erealinge wing	re and siness stimat zed du as min season ane pr	broke es for ed 50- ring t imal s for a oducti	n pip 175%: he 4- ince gric on w	to tredu-day the ultu	close hree ction stor stor ral i et ba	d schools, days througho in commercia m, m occurred in ndustry. ck as young		
16 LOUISIANA		:									be rest	realized ensive d determin wth appe	l unti lamage led un ears.	l late but a til la Most e	April n accu te Apr stimat	. 0 rate il o es o	rnam mon r ea f nu	ental etary rly M rsery	stock will r s suffered value cannot ay when sprir stock losses		
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NORTHEAST LOUISIANA	03 1300CS to 1830CS	ST	+hun	0		3		Hail, Wind Heavy Rain ied by high win		Iberia Parish	not 11 Thre	be avai unknow e homes	ilable m and	until a wash	later ateria	in suf	the fere	sprin d mod	g. Winter Storn		
	and wides isiana du	read h ring th crees,	ail m e aft power	oved ernoc	east n wi	thr th m tili	ough n	northern Lou-		Shreveport, Caddo Parish	fir	eplaces unknow An elect	that m tric p	were u	sed to	all	evia ervi	te bi sor w	tter cold.		
Stonewall, Desoto Parish Minden, Webster	03 1305C	T 1"	hail.							Zachary, East Baton Bouge Parish	12	power 	vn								
Parish Bienville Parish	03 1400C						-golfi	oall sized hail		Collinston, Morehouse Parish	unh	eated ho	ome.	d wome	n died	of	Нурс	therm	ia in her		
Ruston, Lincoln Parish								15 minutes.		Ferriday,	py .	A mother a space	r and heate		er die	d in	a h	iouse	fire caused		
Jackson Parish	03 1620C	T Jone lenced	sboro golfb	, Cho all-s	oudra: ized	nt, hai	Wyatt 1.	, and Dobson		Concordia Parish	13	unknov An elder	øn rly ma	n died	of hy	poth	ermi	a in	unheated hom		
Parish Winnfield/Olla,	limb:	from a	rotte	n tre	e thi	roug	h his	winds blew a windshield.		Alexandria, Rapides Parish		unknow Wetal co	verin			rch v	2 walk	way c	ollapsed unde		
Vinn Parish Boyce, Catahoula Parish	03 1635C							il. ne ground.		Tensas Parish	A	unknow warehou er the w	se ro	of.ove	ralo	adin	3 g pl	atfor	m collapsed		
Simms, Grant Parish and Rapide Parish	03 183 0 C	ST Marb	le-to	-golf	ball-	-siz	ed hai	i1.		Winn Parish	She	unknow o nurse ed fell ight of	ry gr in an	d stor	e meta	llap: l aw:	3 sed, ning	a co s col	tton trailer lapsed under		
STATE-WIDE	south to	the GUl adings	f Coa:	st dr he pa	deep oppin	ng ti O ye	ctic a empera ars.	WINTER STORM air mass moved atures to the Almost to the		Ouachita Parish	13 Se tryi	unknow everal f	n ires haw p figh	caused ipes w tìng w	by sp ith bl as comp	ow to	orch	es de	nd by persons stroyed rura ozen water		
	scenario This ye freezing	cook plear, te for 36-	ace. mpera 48 hou	ture urs i	read:	ings	were uth ar	at or below ad up to 127 blanketed the		Dequincey, Calcasieu Parish Denam Springs,	A		-old	⊮oman	died w	hen a	a sp	ace h	eater ignite		
*Monroe	Single half of The lowest recorded a low temper	tempe tempe t Rust	te and ratur on, C	d 10 e of alhou	to 1! the p in, as	5 de peri nd M	gree mod was	over the north readings south. 4 degrees The warmest rees recorded		Livingston Par Vinton,	con Par 13 unknown 5 Six homes were destroyed or damaged by fires started by fireplaces.										
	pressure :	licate systems sday a st acro	deve nd We ss th	loped dnesd	l in i lay, i	the : Janu	north ary 12	ultiple low west Gulf of 2th & 13th, ceating a		Calcasieu Parish	leu Parish 22 1200CST 0 0 2 0 TSTM WINDS A large tree was blow over and knocked down power li										

,		CAL	РАТН	Ŧ	NO PER	. OF SONS		MATED [†]				CAL	PATH	Ξ	Ni PE	O. OF RSONS		MATED [†]	
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF P (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF P.	WIDTH OF PATH	KILLED		PROPERTY	CROPS	CHARACTER OF STORM
LOUISIA	NA				•		•		-	MARYLA	ND	and D	.c.		l				
Jennings, Jefferson Davis Parish	Two roofs sheds downe	buildi of two were b	ngs we other lown o	buil ver, of sev	lding tree vere	yed s we lim	re bi bs bi	lown o roken	TSTM WINDS r grounds, ff,several and power lines moved east	Statewide and District of Columbi	Arc sul for loc	ted in <u>rec</u> daytime h ations. C	ord 1 iigh t laklan	<u>ow rea</u> empera d, in	he mid dings tures Sarret	for b on t t Cou	oth mi he 10t nty, r	nimum t h and t egister	Cold the 9th and re- temperatures and the 11th, in many red 20 below zero
Cottonport and Marksville in Avoyelles Parish	30 Tre	2000CST es were	uproc	oted,	0 sign				TSTMS were damaged, m winds.		por zer mar a r	rtion of th water pip y could re rescue team	e sta es an call. were	te was d stal Of th treat	in th led ve e cold ed for	e min hicle -rela fros	us 50s s were ted in tbite	. Servi in a v juries, at a fi	or over the west ce calls for fro- colume greater tha five members of re in Boonesboro was lost and pre-
Lafayette Parish	The over	line o	f thus						Severe Thunderstorm tward blowing t, Carencro		wor co- a n	ed drowned ker was sw worker was an was fou ure. In k	lthe vamped resc ind in lashin	boat by hi ued by his u gton,	ne had gh wav helic nheate D.C. t	take es ne opter d hom wo me	n to r ar the . In ean n were	escue a Hart-M Milling apparer also i	stranded fellow- tiller Islands. The ton, Kent County it victim of ex- found, apparent wson store had
Assumption Par.	As ornad of Ba was o gymna ville from stati lines thund	o touch ton Rou aused t sium an ; and a where t on in F	e of a do ge and the dot do the do the dot do the do the dot do the do the dot do the do the dot do the do the dot do the do the dot do the do the dot do the dot do the dot do the do the dot do the do the do the dot do the dot do the do t	severewn in d mover roof and ere provill roup s aft	e thu Pair ed ea and blow trail arked e. To	inder ncour ist t wind wn of ler w d and rees nree	stor tvil to Pl tows f of vere sla were wome	ms moved the second sec	Tornado (F2) ed east, a miles south ille. Damage igh school k in Paincourt- about 100 yards to a service ted and power blown down by ed, one was	Central and Northern & District of Columbia	13 The inc of in hea 14 The	hes fell m the storm Washington viest snow second st	snowfa ost or a com , D.C fall o	all sir f the c nercial . Monu coincid	ice 197 lay, er airli mental led wit 0 than 2	79 for inding iner of tra- th the 0	r much before crashed ffic ti heigh 0 ors too	of the midni linto e-ups it of t O	Snow area as 4 to 6 ght. At the heigh the Potomac River developed as the he rush-hour. Snow th more to the ing the afternoon
New Orleans, Orleans Parish	The damag the s	200CST roof of ing a c quall l with th	ar du ine m	ring entio	a thu	blow inder	stor	m asso	Severe Thunderstorm cciated with cized hail	Statewide and District of Columbia	and ext 4 t new ern 16- 18	continued reme south o 6 inches snow. Amo sections.	'into east p , gene unts o	the evocrtion erally, of from	ening. of Ma with of to	end Salts 3 inc	ing abo nd. Sno sbury n ches we	out mid nw dept reporti re rep	night along the hs ranged from ng 8 inches of orted in the nort Cold
17 MAINE											as tio	a new arct ns. The πi	ic su nus t	rge aga vo degi	in bro ees in	ought 1 Bal	sub-ze timore	ro rea City w	one week previou dings to many sec as a new record
Southeastern	Easte inlan out b estim Hanco Knox and D Accum Howev Count shed	neavy sno rn Maine d. Many y up to & ated 20,0 ck and Wa and Waldo eer Isle ulation o er, up to y. Heavy	from to power a inche a inche a inche a inche a count was poor from a count a	he coa and te s of i tomers on Cou ies. werles over ches f loads sden;	as rist to elephor ce and were inties Frank is and the a cause on a	ain, paboume lind snow with with the phone rearries of the rea	t 30 r nes we w acco out pour abour as wir eless anged xtreme fs to	ed miles ere sna retion ower fo t 10,00 thout p for mu from 8 e easte collap	Wet, Heavy Snow oped or shorted on them. An or 36 hours in O for 24 hours in ower for 46 hours to 18 inches. To 18 inches. To Washington se on a storage ; and on a fish	Statewide	in was the the tem ext the 21 A n the for to	the downto reported City of W -5 degree perature e remely col air crash ew snowsto afternoon the lower rain durin	wn Ba near I ashing s at I ver m d cond of tI rm de . Amo East	ltimore Eagle F gton, [Washing ecorded ditions he 13th veloped unts of ern Sho	e area lock in 0.C. ii ton Na I since serie 0 1 very 4 to bre, w	An in sour the sations of the busly of the pusly of the busly of the sations of t	unoffic th-cent the co al Airr airpor hamper 0 y in th ches we a 2 to	cial lo cral Ga oldest cort the red sal core day ere wid	rature in 48 year wo f3 4b blow zer prett County. For in 50 years, with e first below zer ed in 1942. The vage operations o Snow and continued to espreadexcept snowfall changed
Deer Isle, Hancock County	14 Wind Deer also easte	Ísle which took down	ch made n snow- , causi	it un laden	dulat trees	e 6 to , limb	o 12 bs an	rded on inches. d power	High Winds the bridge to The strong winds lines over south- o the newly	Central, Northern & District of Columbia	23r 22- 23 Sno	derick Cou the day on d. w began la	nty w the :	estware 22nd, a	i thround con	ugh G ntinu 0 of th	arrett ed unt O ne 22nd	County il earl 0	the state from . Snow began late y moring of the Snow, Freezing rain, Glaze hanged over to
18 MARYLAND	and	D.C.								,	tur haz	es remaine	d wel' e-quai	l below rter in	freez ch to	ring a	and tra	vel be	e 23rd. Tempera- came extremely of ice coated
North Central	Freez ways	and sidev	walks.	Numero	oduce us tr	affic	y hazi accii	dents o	Glaze conditions on high- ccurred, and at timore area.	Central & Northeast	fog on1	during th	e mori	ning ar	er sno d afte	rnoor	vered a n hours	reas b , Visb	Dense fog rought very thick ilities dropped to rash of traffic
Central	4th r in Se fall	esulted verna Pai	in loca rk was Bavy th	l floo damage	late ding d whe	of ro	ads ar d cau:	into t nd unde sed a 1	Rain, Wind he morning of the rpasses. A home 50-foot tree to the vicinity at	19 MASSACHUS	,			NONE	REPOR	TED	·.		
Western	passa prope	ge late o	n the ge was	4th in report	mph o ito the ed an	r bet: e mori d pow	ning (er li	followi of the nes wer	Wind ng a cold frontal 5th. Scattered e down in Cumber-										

PLACE	1 5			1 1			1	CHARACTER		1	l ăe	<u>.</u>	∡ ا ہ	જ (T i	1	- 1	- 1	CHARACTER
	DATE TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	OF STORM	PLACE	DATE	TIME - LOCAL	LENGTH OF PATH	WIDTH OF	(YARDS)	KILLED	INJURED	T L	CROPS	OF STORM
20 MICHIGAN									MINNES	SOTA	Δ.								
20 MICHIGAN ntire State	04 All day Driver injure Lonia. Man ci at Owosso. M buildings dam Grand Rapids. from Whitehal heavy driffin, River-Big Bay rain softened sheet with ra and was cover. Hundreds of v Hundreds of v for hypotherm deaths, dozen accidents. T. Four skiers i All roads clo Lower Peninsu ing. Lesser areas. Winds mostly below shelter neede damage to str	ut by flamy power aged the Intens I to Air growth . South snow parid temmed by I chicle a known end by I chicle a known end in and i so of injured i sed in the sed i	lying ger line roughou se low sena. So of ston of track whiseraturto 4 inciden in Warfrostbi juries, achs in in avaluather to 6" of new 35 mph sind chibout 150. Many	lass of section of the section of th	when we when we when we we compared to the com	ind rds, h of the first ozen of tem fitti ozen of the fitti ozen of the fitti ozen ozen ozen ozen ozen ozen ozen ozen	contro broke w trees Sagina crosse es of ss uth of peraturo o solid noon an ng snows s of in ons tre tate. ed auto heart a ng Bear la and and hea driftin 5 mph. ow zero elers. ipes.	indow destroyed, w and d state now with Iron e and ice d evening, juries. Wind, Snow, Cold. ated Two ttacks. Dune. western wy drift- g in other Temperature . Emergency Some wind Many fires	Entire State	9,100 St ccc chaf af and dd Bo cr Th Sa th cas si Hii f aa Is se ne of wa	rong wi ntinued iill te ternoon d I-90. ath was th invo eated w less haz turday len into ses of timated llver Ba ghway 6 illing t abella. ere indi	into S mperati many I Two i I Two i In No. Ived st ind chi ardous morning the sc frostb) at 80	unday ros ir oods v eaths man co randece ll ten into utheas te wer miles cota lver if d brar raffic relate strong on the	eaus exc ere occe unty mor pera ions sout t an ere per redi ay w ches dea d t t t seve	ing neess of the session of the sess	ar bli: 100° i able ii turday he oth Winnes heast: On: Lew pa n. A t and cured: eather pt acred d week d. A d. A d. A d. A	zzard celowd. nigh' er wa: ds fri er wa: ds fri ota l: Saturi Sunda; rt of traff power urais Saturi O D D S M I t tem man w	cond zero cing p. pt., Jar sin if	Extreme Cold arry 9th and itions and win. By Saturday ortions of 1-1 warry 9th. Or olower county. To 45 mph os 80° below. Minnesota aturday after wening. Winds roof off the grant of the standard of the swere broken land, and at and Sunday that the standard of the cold o
etroit, Wayne County	fuel used for 12 Overnigh Woman died of	space i	neating	1				Cold		wi dr in	thout wrifted conjuries.	arm cle	thing.	Ma	ny hig Highv	hways :	cros rol r	s the eport	state were ed few serious
ntire State	of her house. 16-17 All day Man died of e to, but less Several inche Great Lakes, followed by s 17th. Most n travelers in for frostbite one death. ma caused by ove	xposure intense s of sno l to 2 : evere bi orth-son emergen . Two on ny injun	than tow on sinches lowing uth roa cy shel deaths ries in	hat or outh a elsewing and drawing dis- ds claused ters. in state	Ston f a we and ea here, riftin osed. Many	ek e st s on t ig th Abo per	ry simi arlier. hores of he loth rough to ut 100 sons tr d heart	f he stranded eated attacks;	Southern Minnesota	no ar sn ce Fo an	avy snow rth of 1 ea 17.4 ow storm ntral M. ur or med d through at claim ree men	inchest inches n. A I innesot ore inc th extra ned one	er. I fell d inch a into hes of eme no life	n the whice ban wes sno rthe was	e Minn h resu d of s tern W w fell ast Mi indire eart a	eapolis Ited in now fel isconsi over m nnesota	in si/St. a re l fre n non nost e latee while	souther Paul ecord om Glorth of south of southout of south of south of south of south of south of south of sout	Heavy Snow east Minnesota metropolitan for a single mecoe in south Chippewa Fal ithern Minneso ic accident the heavy snow weling snow. Blizzard
ntire State	23-24 Freezing rain southern part north on the temperature a south shores of the 24th. accidents, 30 by carbon mon in emergency businesses cl	with upof star 23rd, for and snow of the of	p to on te, sev ollowed shower Great L person ipping Six hu	ne inc veral I by w s, mo akes, ns inj on ic indred	inches ind, s stly (into ured s e, 6 s trave ds, s	of of capid on the the coerso	ing on snow it ly fall le east early partonobil ons over a cared s, and	ing and bart ee ee for		ea ov de St Da Mi fo Ja An st Sa 2-	stern M. er the : veloped . Paul : kota bo nneapol r a sin nuary 2 oka cour randed turday : 3 ft. d	innesot state F The metroporder whis reco gle sto 2, a man ty. H 2.7 mil morning	a Friday heavie litan ere am ived 1 rm set n died secon es fro . The	ay m and st s area ount 8.5 two fro d de m th d ch	orning by Sat nowfal and i s were inches days m expo ath oc e ir ho e died ills o	, Janua urday n 1 areas n the n in exc which earlien sure on cured n me in h while f 35° h	ery 22 norning were northways of broke broke . Or ne mil when a lubban tryin	2. Hong bli e in the second for the free coup rd coup rd coup rg to zero	a southern and carry snow spre czard conditi the Minneapoli clong the Nort inches. cowfall record lay night, mm his house i ole became unty early walk through . The husbanc
ower Peninsula	31 All day Heaviest snow Huron line ta of state and persons, all fatal heart a schools and b in automobile falls on ice. highways. Th shelters. Th one barn set	pering 3 to 7 in the ttacks usiness accide Twelv ree hun	to 8 in inches Detroit shoveli es clos nts. A e hundr	in ex in ex Metr ing sn sed, Nbout red au	at so treme opoli ow. 1 About 150 p tomob d mot	nort tan A lany 40 person iles	tter-Poi ist corr ih. Fil area, su roads b persons is injui abandor is in er	er teen affered slocked, injured red in med on mergency		cl im fr ac ja la	aimed 8 passable some a iday ni cidents ek-kniv	heart due treas ar ght. N occurred semi f spans	attack o drif d Inte any mo d in t -trail	vic ting rsta tori he T er t	tims s snow. te Hig sts be win Ci rucks.	tatewic Drift hways : came st tics me Seven	le. Men s wen s and crande trope al fa	Many in re fro d 90 o ed. l olitan arm bo	ring activitie roads became m8 to 10 fec were closed Five major n area involvi rildings with sses of lifest
									22 MISSISSIPP	,									
21 MINNESOTA Whalan (Fillmore County) Grand Rapids (Itasca County)	5	in the	morning	g. 1 ure wh	0 nile a	0 ttemp	0	Extreme Cold from her farm Extreme Cold o walk home.	4S New ton (New ton Co.)	of 15: 4: ki: cle to: or and pro	1455 tornado Newton highwa miles no filed and filed was ear if h rnado st damaged i 40 uni operity a dairy stroyed	and mo y 80 a rth no 17 ot found e was ruck. Thre ts of damage cows a	i down yed to d into thwes near l nor a tota mob i farm was ad 200	the erstance of the court of th	norther te 20 Hickorinjured lestrop of his 27 homes, 2 ment we atted no ses of	outh of east ac before y, One i. The ed hom home w es wer servi ere des ear 2 m timber	the ross lift man w man w e.It hen t e des ce bu troye illio were	town highwas howas is no he troye ildin d. n. 60%	s t

						_												JANUARI 1902
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)		INJURED 40.06	ESTIMAT DAMAC		CHARACTER OF STORM		PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)		SONS	DAMAD DAMAD		CHARACTER OF STORM
MISSISSI	IPPI							 	25 NEBRASKA			J			 J			
most of the state	11-14 An arctic air	ratures	below 10	degree	ate drop s over m	oping most (of		Southeast Nebraska	Hea	Evening my snow forted at 1	11 i n					8 inch	Heavy Snow es
	the state on worst winter years. On the rain and snow By the 14th r covered with in a 50 mile through Jack conditions to death in Col-	the llt storm i le 12th a moved nost of snow. F wide ar son to n o the so	n. This s n hississ nd 13th a over the the state rom 4 to ea from s orth of 1 uth. An e	et the ippi in succes state f had a 6 inche outh of eridian	stage for the passion of rom the glaze of s of sno Vicksbu with ick voman fr	or the st 20 free: north fice w fe: urg ce store	e zing west. 11 orm to .		Central and Eastern Nebraska	-10 Ten and han chi of	Night to Morning meratures leastern leastern lea	fell (Nebrash y vehic 50 to S	a resu les. 00 belo	lting Gusty w. Ar	in froze winds po elderly	en pi; ushed y wom	ntral pes an wind an die	
	caused the M the mayor cal water pressuresouthern and from heavy in 20,000 homes roads caused Close to 300	Comb wa lled for re. Nume central ce and s with ou hundred	ter syste water ra rous ligh parts of now. Down t power. s of moto	m to fa tioning t struct the st ted power Ice and	il. In d due to tures in ates col r lines d snow of le accid	Jackso low n the llapso left covero	ed ed		Eastern Nebraska	Str at wer mea	Morning Evening rong north times in re common, soured at	winds blowing but a Norfoll	snow. peak s	35 i just of AM CS	:o 50 m.; 64 m.p	p.h. .h. w damag	dition winds as e repo	
6N Meridian (Lauderdale Co.)	23 0257 CST A small torns	1/4 do toucl	100 0 ted down	0 6 miles	5 north o	of Mer	Tornado (F1) ridian		Panhandle of Nebraska	Wes	st winds g ea with da gns, and c	usted i mage r	ported	.p.h.	in the	Scott	sbluff	
	along highway lifting. At C the state pol It fell and c of a small c cement blocks home was blow foundation. Noccupants of	258 CST ice in : emolishment blowere for over funerous the mcb:	a funnel the area. ed the ba ock store ound 30 y and anoth trees we il home a	cloud was A larg ck of a were b ards awer was re snap nd the	as report the was a report was a report was a report was a removed before between the removed are remo	rted as up n. S mcbi from lown	by proofed. walls Some Il its down.		Central and Eastern Nebraska	From cer	Late Eve to Midda ezing rai ads; walks ntral and ncoln sout y, power f wn and sho	y n asso , and ; southe h to t ailure	power] ast Nel he Kans s resul	ines. raska sas li ted a	especi.especi.eround ne. Lat gusty	ally Omaha e in winds	coate in eas and the blew	
	hearing a ter damage was 60	rible r	oar like Llars.	a train	. Estima	ited			Pierce County	Li an	0100CST ghtning st i applianc fteen hogs	rike h es at	a farm	damag howe			syste	Lightning em
23 MISSOURI									Merrick County	Li	0200CST ghtning se using heav	t fire		0 home a		4 Cree	0 ≥k	Lightning
South Central through East	One of the moved from Eastern Mi 12 to 20 in to 21 inch were due traccompany in reported di snow after several da National Giprivate in streets an Louis area which had of water in portions or been common Black Rive Bluff. In flooded on it was bur. The damage estimated	the Nossouri. ses. Some heavy es. Some heavy the test of this seys where the ses of the ses o	snowsto orthern The st ith a f ie of th thunde snow. S leart at torm or s s calle s calle c, espec tourne deast an tate. T st-Cent ted fact the str y 30 wh ler a 12 e s nows	Ozarks orm du ew repe larg rstorm everal tacks durin now fed out paid ially ollowe up to d Sout wo inc ral po ories eets w ile th inch ttorm h	the comped from the control of the c	gh from the factor of the fact	ns re ling ssouri ear ins d		Central, North Central and North- east Nebraska East Central Nebrask	Hee bas jui sn ev bl cr lii so dii be st bii Ch co So li r ar	All Day any snow a not about ist south cow began is ening northizard core ented 5 tc ness. Transighter snow utheast Northizard core came disonorm, as house in the around erry Countinsiderable inches at Widd 12 inches inches at Widd 12 inches in core in c	O mile of Mull the had the wind of 10 for the line of 10 for the line of the l	s eith en to mornin s gust s in b ot dri the sn ccurre , but At Ru ed and to le Thre Neill also wn thei ills in dd Hart lowells	oo 15 i er sid South ding 45 Good and di	nches fee of a l Sioux Ci by after to 60 m; snow. d blew can became outh cere as became outh cere as nelder of exports. Scarr, the cons sufficient 2 per to the condition of the	tity. The victor of the control of	from The and . caus winds winds willit ossibl and d . an in the was frost in end ess. t Ponce; 14 at Nor ley.	y e. a; folk; High Winds
									26 NEVADA									
24 MONTANA Blaine County	5 Early A Man froze to to town when	death a			lking		Bitter Cold		WESTERN NEVADA AND EASTERN SIERRA NEVADA MOUNTAINS		y snow c	osed r	aods a		0 ised nume	5 erous	0	HEAVY SNOW
Missoula, Powell, Granite, Lewis & Clark Counties	15 0600- 1800MST Artic air cr causing bliz 2 people wer	ossed ov zard con	er the Co	ontinent over a w	ide area	a.	Blizzard		27 NEW HAMI	mir	<u>or</u> accide				ge was r		ted.	
Flathead Lake. Missoula Counties	23 Most of the day Heavy snow o	f up to norther	2 feet fe n portion	ell over	these		Heavy Snow and western parts		Southern	01- Sno flo Roa	02 Aftn w, rain an oding. Po	wer ou azed.	tages a	0 lused idded	0 some urb to the p	roble	ms.	Snow, Rain and Freezing Rain sed, damaging

																			JANUARY 198
	CAL	РАТН	Ę	NO. PERS			ATED!	-			CAL		HIA	Į.	NO. PER		ESTIM.		
PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF I	WIDTH OF PATH (YAROS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL		(WILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
28 NEW JERSE	Y	•						·	NEW YO	PRK,	West	ern							1
	Siberia dist	urbing a d extrem c air ma	ertic c nely ic ass The	hills, y road Sibe	, and l d cond rian E	leavi: litio: Expre	ng reco ns. Son ss. The	wind chill factor	Western New York, Finger Lakes and Southern Tier Counties	driv powe	cestorr ring imp er lines iged bai	ossil , tre	le. e li	The wei	ight c	f th	e ice i	roke	Wind and ice storm mpanying winds
									31 NORTH CA	ROL	.INA								
29 NEW MEXIC	co ———	_	NONE F	REPORT	FED				Union County Monroe	4	0600E	ST			0	3	4	0	Wind Thunderstorm
30 NEW YORK,	Coastal						·			wes A s	ine of tern No evere t ght inj	rth C nunde	aroli rstor	na dur m demo	ing th lished	e ea la h	rly mo		near Monroe with
Extreme Southeast, Nassau, Suffolk Co., Metropolitan Area, Westchester Co.	wave of the s which closely The storm of ture of the s	eason. T resembl 1977 was eason st d to 8 d	he ext led that the c ruck t	reme it of : coldest	combin 1977 m t in a stches	nation made i made i madeci madeci mater i	n of wi the col ade. Th Putnam	Cold Wave the worst cold ind and cold air d wave historic, se coldest tempera- Area when the stchester County	Orange, Durham and Granville Counties	Nor move nor at dam cit its to sus	thern D 70 knot age and y of Ox roof a	f thu lina. heast urham s wit many ford nd on lding	A se at 5 Coun h the tree in Gr e wal	evere to 00 mph oty into e thunders were ranville 11. Dam otents.	hunder from I o Grai erstor uprod e Coul age es Also	stor etwe vill m. S ted. ity,	m in t een Dur le Coun several . The h where ited at	he lin ham an ty. Wi build ardest a fert \$90,0	d Hillsboro across nds were estimated ings suffered wind hit area was the ilizer plant lost 00. \$25,000 damage cco warehouse
30 NEW YORK	Central								North Carolina		ecord b						eather		Winter Weather
AREA-WIDE	25 below in a to 36 below. and on the 11 the area. Witchest wind frozen water bursting pipe in starting a bite were not Freezeups als witches and 10th and 11th roadways and reported recewith blowing old man in the start of the	cold spanny loc Daytim Lth and Inds of chills pipes, es flood and many ed espe so cause train d h, snow dropped riving s and dri ee Bingh He app	ations. e read: 12th 1/ 20 to 0 of 50 to some of ed buil school cially d probloors al squalls everal fting, amton rearently	. Oldings of 4 degral 30 MPH to 60 f which lems in the 1so case to the cause area of the 1so cause area of the	I Forgon the rees will with below the cause for fire the lees to for fire of sneed by of Brook Front F	e in 10th as the gust refreshed. Fight refreshed refresh	the Ad n never he high ts at to . Man extensi biles e Sever ters ba ghters, ys for Lake 0 zero. n the s strong County,	Cold 6 Snow squall m near zero to irondacks, dropped got above 9 degree est temperature in ines over 50MPH, y locations raporte ve damage when xperienced difficult al reports of frost tiling area fires. Frozen railroad trawelers. On the matric closed some Locally some areas quall areas along winds. A 64 year died from exposure ant building where	32 NORTH DA 7 Statewide	wes mor tem die	tern anning of peraturn d durin durin the continuation of the during the during the emotor the series of the during the emotor the series of the during the duri	d cen the e of g the zzzardd d dri mph a Fargo e 9th the vices a road ists	conc fting t Wah in C and groun anc light were	North, Banne egrees due t t t t t t t t t t t t t t t t t t t	Carolir Elk below o expu o with sand s in Ri uesst zard, ngs w delay ocked ed.	ina construction of the arthur	on the every Co. State or hy O Siderab in orth and Countried state 10t letic color cancellor ca	13th a ounty ewide pother 0 le west tty and tate- hontest ed; elled; and	Ground Blizzard Extreme Cold
30 NEW YORK , Western 7 counties, Finger Lakes and Central Southern Tier	4-5 Strong damag felled trees	and pow	er line	ieš. Bi	us i nes	ses a	and	Wind d windows were	Statewide	colinea ate wom Hal	strong d tempe rly 110 to sev en who liday i	ratur belo ere f becam	es to w. T rostb e str	creat hree poits in anded	e wind ersons cludin	d chi s suf ng tw les r	lls of fered o youn	60 to moder- g	Winter Storm
Western 7 Counties, Finger Lakes and Central Southern Tien	In Lake Erie crashed again Buffalo Harbit tossed about Yacht Club m 10-11 r A winter sto forced wester cancelled fl on floors at closed. Snow driving importance of the same o	nst shor or break and did aported rm now c rn and c ights. B the ter drifts o ssible. tches. Toze to oze to oze to logged c alation	eline water, a mil heavy (alled lentral luses cominals up to Many co death xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	proper made lion (damage 2 the BI New) could record ars we invers in the e to 1 thing.	rties of gi dollar e to i 10 lizzar York t nools a eet an ere ab who h eir ca the ex a few g wind	and it ant cas darks darks do a sin. Sind beind point and or and	flooded concret mage. I ockyard 1982 standst tranded usiness or visi ned in heir ca Many we e cold.	e slabs, was he Niagara		with Bur Cour Cours cour	inter sin very: leigh Colors leigh Colors sed the cellatic eral platic icles be n Schoo nty than for Stanle fered fin who we le Lake e strang n an app //.	strongounty indch ind ser closi on of in rura is became I wres t became I wres	g win and ill to veral ure of social dight all Du stuck the mount of the contract of the contr	ds (48 46 mph 46	mph a at Fatures s of s athle power ity). by drivernity county cluding lading l	t Bi irgo of 5 nowo etic out Man ifts own ght g a urs and Minn Bism	smarck in Cas in Mount on the Six per in Cas	in searly storm e , and up to s in ome n 14th opple colder en who	
Erie, Chautauqua, Cattaraugus, Monroe Counties	16- 17 A winterstorm trees and pow snow forced in resedential p	ver line flight c	s. Drí: ancella	fting	and b	lowin	ng	Wind, unusual cold											

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	OC AL		PATH	ATH.		OF SONS		IMATED*				SCAL.		PAIH	HT.	NO. O		ESTIM DAM		
PLACE	DATE TIME - LOCAL stranden		LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED	NJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL	STANDARD	(MILES)	WIDTH OF PATH (YARDS)	KILLED	NJURED	PROPERTY	CROPS	CHARACTER DF STORM
NORTH D	AKOTA								*	OHIO										
	21 22 23 A severe w with heavy County, 7. 8 inches a	sno 4 in	w (7 : iches i	inches at Will	at Bi: iston	smarck in W	k in illia	Burleig ms Cour	h	Ashland, Trumbull, Mahoning and Columbi Counties.	A 1 cou	ine o	O- OEST of thund with with the second	vinds	to 80	MPH.	Seve	eral b	uilding	High Wind
	at Minot i in Stutsma County, an very stron at Grafton	n Wa n Co d 18 g wi in	rd Con unty i 1.8 in nds (! Walsh	unty, 1 and Gra ches at 59 mph County	l inch nd For Fargo at Jar , and	nes at rks in 0 in 0 nestou 51 mp	t Jam n Gra Cass wn, S ph at	nestown and Form County; 52 mph : Fargo;	•	Entire State	uti 04	090 190	lines (O- OEST	were	downed -	. 0	3	6	0	High Wind
	and windch The storm conditions The storm the cancel athletic e flights an I-94 and I feet high,	was occ resu lati vent d bu -29	worse urred on of s; and s serv became	in the the 22 in the almost d the covice. I e block	east nd and closus all s ancel Many s ed by	where d 23rd re of social lation roads drift	e bli d. many land n of incl ts up	zzard school l plane uding to six			high the are seveline deb	h winday. as the erales. ris. Marie	cold fr ds buff Wind roughou buildin Three p The mo tta, Wa a man.	eted gust it th igs a leopl	the er s reach e after nd dowr e were erious	itire s med 50 moon. med tre injure injury	tate to 6 Thi es a d by was	throus throus the through the	igh in all iged ility ing iined	
	road into Many accid roads and truckers w Salem (Mor for frostb (Pembina C tractor fo	ents some ho s ton ite ount	occur peoplideswi County includy) man	le were iped ea y). Th ding a d n who b	injum ch oth ree pe 62 yea ecame	ed in er ne eople er old pinne	nclud ear N were d Con ed un	ling two lew treate crete	d	Entire State	to and dam tre bit	reme a sta free age i ated e. T	0- OEST cold, g ndstill zing pi n the s at hosp wo elde their	. S ipes state sital erly	chools caused . At s for a women s	and sn and of thousa least l exposur were fo	fice nds O pe e an und	es were of do cople o nd/or froze	e close llars vere frost- d to	
	24 A winter s Bismarck i (44 mph at in Stark C roads (inc several pl man suffer covered st died of an snow.	n Bu Dic ount ludi ane ed a eps,	rleigh kinsor y) for ng I-9 flight hip i and a	h County n and 59 nced the 94), and ts at 8 injury wa a 70 yee	y) and 9 mph e close d the ismarc when h	d stro at Ta sure o cance k. (ne fel d Bism	inche ong w aylor of ma ellat One B ll on	inds both ny ion of ismarck snow man		Southwest quarter of State	One 23 24 One qua bro Riv Mia	to to to the terminal transfer transfer to the terminal transfer tr	wo incl of Ohio about rom Circ outh of	nes con ninor clevi	of rain Januar flood ille so lton;	fell i y 23rd. ing on uth; or	othe O n th Th the the Litt	er in s he sounis ra Sciot e Grea tie Mi	Akron. 0 thwest in o t ami	Flooding, Heavy Rain
	27 Ground bli blowing ar mph at Dev Dickinson in Burleig 1-94 from Stutsman (of the blo stranded t (Barnes Co area, over several ac of icy roa	id di in S in S Farg count ckec he r unty 80	riftin Lake Stark Sunty) 30 in ty) to d road night of are cars	g snow in Rams County, caused Cass Co become is, over of the a. In ended u ccurred	and s ey Co and many unty impa 100 27th the M p in due	trong unty. 41 mp road to Ja ssabl motor in th inot the d to a	wind 52 m h at s (ir mesto e. E ists e Val (Ward itch combi	ds (46 mph at Bismare neluding own in Because were lley Cir d County and ination) cy	Southwest quarter of State	29- 31 Rai man of Gre the Mia wer wer	infall ly riv Ohio. eat Mi stat mitow e aff e rep tle M	of 2 ers and The iami Ri e. Sev n and n ected t orted. iami Ri d the (to 4 d str worst ver : veral lany by th Flo	inches reams i ; flood in the people structu e water oding a the Ma	caused n the s ing occ southwe were ures al . Onl ilso oc id Rive	3 l flo courre est o evac ong y mi curr	6 boding hwest ed on corner uated the si nor in	of quarte the of at cream njuries	Heavy Rain Flooding
33 OHIO	, ,			,						Northwest and East Central			ooding tral Oh							Heavy Rain Flooding
Ottawa, Huron, Erie and Lorain Counties	0700 04 0800 A line of through t 1/4 inch tures and	thu hese hail	count . The med h	ties wi e winds undreds	th 60- damag of to	-80 Mi ged se rees	PH wi evera and p	ont race inds and il struc	 -	34 OKLAHOMA	and on	snow the M	melt. Jahoning	The	most se	erious	floo	oding (occurre	d
Lorain, Cuyahoga, Lake, Medina,	lines. 1 Clinton F 04 0800 0930	igh •					у.		: High Winds, Hail	Tom, McCurtain County	Two sout One	heast man,	unting of Ida the fa	abel,	were :	struck illed a	5 mi by 1 nd h	iles lightn nis so	ing. n was i	Lightning
Geauga, Richland, Ashland, Knox, Wayne Stark, Summit and Portage Counties	A line of crossed t hail up t buildings lines als in Elyria floor ren in North	hese to 1, wer o be o Lo	e coun 2 inc re dam eing d brain d with	ties wi h in di aged wi owned. County, 2 mino	th 60 amete th tr An a had n	-90 M r. Hi ees am partmo much m uries	PH wi undre nd po ent o of th . A	inds and eds of ower complex ie top school	I	Binger, Caddo County Cement, Caddo County	A ma of e in C wate the the	xposu entra er pip	, appai ire. Al: 1 Oklai es and ir dama:	so wi noma wate	th tem and near r meter	on his peratur ar ten rs froz report	por es r belo e. T	rch an near z ow in There	d died ero the No: was no ge was	Freezing Temps th, numerous way to evaluate widespread across Freezing Temps
	roof take injuries. the Great in Richla when they Four mind	n of Ser (er (nd a	ff wit everal Clevel and As re rol	h 8 chi struct and are hland C led ove	ldren ures a. S ounti r; no	sust were ome m es we ne we	ainir damag obile re de re ti	ng minom ged in e homes estroyed ied down	1	Anadarko, Caddo	An e catt resu 29	lderl le, w lt of 1949	y man, as unal exposi	ole t ure.	o get i	nile fe up and O	edin died	ng his dasa	?	Hail
	area as a being blo damage wa	res	ult o down.	f falli Consid	ng ob. erabl	jects e str	and uctui	people ral		Oklahoma City, Oklahoma County	some		et floo			0	0	0 ,		Funnel Cloud

PLACE	TIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD OP BAH WIDTH OF PAH WIDTH OF	PLACE	TIME - LOCAL STANDARD - STANDARD - LOCAL
	TTME - LC STANDARD WIDTH OF PA (PARDER TY OR OP STANDARD CHARGED INJURED CHARGED CHARG		MADOLS - STANDAR - STANDAR - STANDAR - STANDAR - MIDTH OF WILDED PROPERTY CAROPS - CROPS - CRO
OKLAH	AMA	38 SOUTH CA	ROLINA
Oklahoma City, Canadian County	30 0030CST 3 ? ? Flooding Three children drown in a flooding creek, in far southwestern Oklahoma City which is part of Canadian County. A pickup truck with seven persons riding in the cab was swept off the road into about nine feet of water in a	Along Saluda, Broad Congaree, Wateree, Lynches & PeeDee Rivers	1- 14 Heavy rains the last of December and first week of January produced the heaviest lowland flooding along these rivers since March 1980, and in some cases earlier.
	creek bed. Two adults escaped out the driver's door, one adult, and one child escaped out a sliding rear window.	Anderson, Greenwood, York, Chester Counties	4 0300- 0500EST 0 1 4 0 Thunderstorm 0500EST Wind, Rain A strong line of thunderstorms moved into western S.C. ahead of a cold front. A localized windstorm or thunderstorm downburst at Anderson destroyed a warehouse, damaged a large department store, one or more mobile
35 OREGON -	NO REPORT RECEIVED		nomes blew down power lines and trees. Scattered damage over several counties was reported as squall line moved east.
	/ANIA, Eastern	Statewide	ll early 2 4 4 4 Hard Freeze morning Record low temperatures with readings as low as -10°F at Caesars Head to around 0°F in central S.C. caused heavy
Eastern Penna.	03 1200 to 04 1300 EST 0 0 4 0 Heavy Rain, Glaze		damage to exposed waterlines, etc. One person froze at Columbia, another at Charleston did not survive a severe case of hypothermia. Flowers and vegetation damaged.
	Rain fell over Eastern Pennsylvania Sunday, the 3rd, into Monday. The rain was heaviest during the early morning hours Monday. When the rain began on the 3rd temperatures were at freezing or slightly below over much of the area. This resulted in icy conditions and resulted in many automobile accidents with accompanying injuries. Rainfall amounts were 1.50 to 2.20 inches over some sections, mostly the southern two-thirds. This resulted in roadway and stream flooding with drainage flooding entering a few buildings.	Statewide (except south coastal plain)	12- 14
Eastern Penna.	04 2100 to 05 1400 EST 0 0 4 0 High Wind		on trees and power linesespecially in north central and northeastern countiesdisrupted utility service and caused some loss to forestry interests.
	High winds with gusts over 50 MPH in many locations caused minor damage across Eastern Pennsylvania. The highest winds recorded were 52 MPH at Chambersburg in Franklin County. The roof was completely torm off one home near Mercerspurg, Franklin County.	39 SOUTH DA	
Eastern Penna.	13 0300 to 2400 EST 0 0 2 0 Heavy Snow	Statewide	9- 1000 CST 2 0 ? 0 Ground Blizzard 12 2100 CST Extreme Cold
Eastern Penna.	snowfall over Eastern Pennsylvania accumulated 3 to 6 inches. The heaviest amounts fell over the poutheast portion where huge traffic tie-ups resulted.		Winds, 20-40 mph accompanied by 1-3 inches of snow, created groun blizzard conditions. Temperatures as low as 30 degrees below zer Two deaths from exposure were attributed to the storm, including a sixty-nine year old Scotland (Bon Homme County) woman and a Vel lem (Marshall County) woman. Both tried to walk for help after their vehicles stalled. Near zero visibilities and snow drifts u to five feet deep forced the closure of numerous highways. Minor power outages were reported.
	3.00	Statewide	15- 0500 CST
Eastern Penna.	Light snow resulted in 1 to 3 inches accumulating, but strong winds developed as the snow tapered off resulting in considerable drifting that closed some reads. Rapidly falling temperatures accompanied the strong winds. Temperatures fell to below zero across the state by Sunday morning, January 17. The lowest reported in Eastern Pennsylvania was 25 below zero at Pleasant Mount in Wayne County. 22 2200 to 23 1000 EST 0 0 4 0 Heavy Snow, Ice Storm		One to four inches of snowfall and northwest winds up to 45 mph (brief gusts 50-60 mph) created havoc with blowing and drifting snow. Wind chill indices ranged from 50-80 degrees below zero an visibilities were near zero across most of the state. One fatali was attributed to the storm with the death of a 75 year old Milbb (Grant County) man due to exposure. There were numerous weather-related traffic accidents. Major accidents included: a truck blo off Interstate 90 near Murdo (Jones County) injuring the driver; a truck blown off Highway 281, turned upside down into a ditch north of Plankington (Aurora County) and a truck slamming into a bridge on Interstate 90 near Murdo (Jones County). One of the st largest commercial nurseries near Watertown (Codington County) reported numerous fruit trees killed by the bitter cold.
	A huge winter storm moving east across the nation brought snow in amounts of 3 to 8 inches to	Statewide	22- 0500 CST 1 0 ? 0 Heavy Snow 24 2300 CST Blizzard
36 PENNSYI	Eastern Pennsylvania. The snow gradually became mixed with and changed to sleet and freezing rain before ending in the early afternoon. The freezing rain caused an accumulation of ice on roadways, trees, wires and other exposed objects. The ice accumulated to a half to one-inch thickness in some locations and caused damage to utility lines and trees. The ice also resulted in many traffic accidents. Many traffic accidents also occurred from snow and freezing rain lare on the 19th into the 20th and again when 1 to 3 inches of snow fell on the 21st. LVANIA, Western— NONE REPORTED		A winter storm of long duration lasting 3 days virtually paraly; South Dakota with snowfall accumulations from 6-20 inches. The heaviest snowfall at Elk Point (Union County) was accompanied a rare thunderstorm. Subzero temperatures statewide coupled with strong winds of 30-50 mph sent wind chill indices to 50-70 degree below zero. One woman apparently died of exposure near her home in Aurora County. Peak wind gusts of 61 mph were recorded at Gavin's Point Dem at 8:30 pm, January 22. Snow drifted as high a fifteen feet. Blowing snow reduced visibilities to near zero mos of the duration of the storm. Hundreds of motorists were strand Numerous weather related traffic accidents occurred due to the high winds and near zero visibilities. Some rural power outages were reported. Major highways, interstates and airports were closed. The Governor of South Dakota ordered 1-90 from Chamberlt to the Minnesota State Line closed at 2 pm, January 23. Mail setice was limited. Mumerous businesses closed. There was no Greyhound bus service. 99% of all roads in central and eastern Sout Dakota were blocked. No travel was allowed as snowplows were unable to make headway until January 24. A few early lambs died in

																_				JANUARY 1982
		CAL	РАТН	TH.		OF SONS	ESTIMA DAM					CAL		PATH	Ĕ		. OF SONS		ATED1	
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF F	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL	STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
40 TENNESSEE										41 TEXAS, Sou	the	rn			L	1 .				
Memphis, Shelby County	A th		orm was	repor	ted j	ıst ea	ast of	niles a	High winds, hail an hour. Hail with emphis Airport	south Texas	nor of	the nig tic air th wind Jan. 11	surg s. As , cit	ed so high	ln south	thre re se h Texa	ough ' ettle es ex	Texas d over perien	10 co on stre the a ced the	ong rea the morning e coldest temper-
Lauderdale and Tipton Counties	tion town Ripl	ss the tw in Arp, Ripley. ey, where ipton Cou mobile ho	o count and sev The mo a mobi nty, ha	ies. eral p st dem le hom il was	A mobi late p age was e was repor	an hile ho glass as in compl rted s	nour ca ome was window the Ha letely	sused a blows ws were alls as blown one inc	High winds, hail scattered damage n off its founda- b broken in down- ca, northeast of over and destroyed thin diameter, lown onto a pickup			*Junc *Brys *Aust *Hous *San *Vict *Beau *Del *Corp	tion n-Col in ton (Anton oria mont- Rio us Ch	lege Airpo io Port	Station ort) Arthur	n	7 de 9 (e 11 (e 12 (e 13 (e 14 15 15 20 (e	egrees only 9 coldes coldes coldes	F th time t since t since	t morning included s temp. below 10F) a 2/2/1951) a 1/31/1949) b 1/12/1962) cord minimum)
Murfreesboro, Rutherford County	Ligh dest		h. Lig	htning	came	and a	house the mo	causi obile l	Lightning ng fires which home vie the tele- lines.		an i	9 pm CS unusual	T Jan ly pr	10 a	and remarked per:	sined iod of	belov f sub	w free freezi	zing u	res were below 32F ntil midday Jan.12, the region.
Pulaski, Giles County	Thun Pula bank	ski causi	ng Rich r Hill	land C	reek t No se	3.67 i to spi erious	ill out flood	in t of it ling or	r property damage		the and to hea ove	city d strain close s t build rtaxed	ue to ed li chool ings, natur	power ines. is and From	er line Some an i busine n Burne ns deli	snaps reas of esses t to (very s	s as f so due Georgi system	the un uth ce to ina etown ms. In	usual ntral bility to Bry Austi	west and north of cold contracted Texas were forced to adequately an high user demand n an elderly woman.
Dyersburg, Dyer County	his '	-year-old head died				y fell		Lng	Cold cold. Extreme cold		wher nor don	n her o th of a e to pl	lothi Del umbir	lng ca Rio- ng as	ught f: San Ani pipes :	ire. T tonio- froze	Through Housand	ghout ston l burst.	ine, m Serio	e cold, was killed ea, and especially uch damage was us water damage w and leak midday
Statewide	extr east Memo	. Temper	d as Ai atures degrees	ctic a across below	ir be the	came i State at Ci	fully (range rossvi	entrend from lle, (e ched in the South- 2 degrees at Chattanooga and		Jan Gal abn	. 12. e force ormally	nort	herly	winds on Ter	which	ush aysa	ered i	n the	cold produced Jan.10. This e upper coast.
Memphis, Shelby County	11 An 80 house		d woman	appare	ently	froze	to de	ath in	Extreme cold h her ramshackle		tem are ed, In	peratum as regi but su the Wir	e the stere ger o	ere wa ed 28 eane Carden	to 30F. (50 perc	ok win . No s cent u	th 25 seriou unhar ustal	, but us dam vested City-	the ma age to) was Carriz	eeze. The coldest in citrus growing citrus was report- hurt by the cold. o Springs-Uvalde
Sweetwater, Monroe County		lderly Sw Ly lockin			appare	ntly	froze		Extreme cold th after acci-	much of south Texes		nificær 12 Nigh			ning		nd can	bbage 6°		ed. Ice Storm
Statewide	Tenne heels	essee and of some d hazard	2 to 3 extrem ous tra	inches ely col vel co	in E ld tem nditio	ast T perat	enness ures S d scho	across ee. T unday ol clo	Heavy snow West and Middle The snow came on the and Monday, and usings. A hotel in tranded travelers.		ed o	ed east over so ce of t mass al eloped	ward uther he di ready eastw	acros n Tex sturb situ	ance ov	nern M Jan. 1 Vertop Ver so Kas al	lexico 12. The ped a outh the	e and hicken an unu Texas. the Ri	rogre ing clo sually Freez Gran	ss- ouds well in ad- cold low level ing rain and sleet de at Del Rio by
Clarksville, Montgomery County	tempe dison	ratures	got to his w	12 degi	cees.	ze to The	death man ap	durin parent	Extreme cold ug the night as low ly became er a long period		Uva Chr Sou on	lde- Ke isti li th of t above-g	rrvil ne re hat l round	le an ceive ine l l obje	es, Mos d signi ight fr octs. Fo	st oth Lfican reezin	er an it gla ig dr:	reas n azing izzle st tim	ortho from from from from the second	o-Brackettville- f a Laredo-Corpus reezing rain. thin cost of ice any years icing
West Tennessee	for a	i low in l Ing exten	Memphis sive pr drizzle	, freez oblems froze	for d	lrizzl Iriver	e bega s thro	saw 0 n duri	Ice, freezing rain degrees recorded ing rush hour : West Tennessee. old ground turning		Wide as repe tra Chr	espread ice cos orting ffic ac ist, Ho	trev ted e traff ciden	rel di expres ic ja its ir i, Bea	isruptic isways, ims, imp icluded iumont,	ons re overp assab Austi Port	esulte esse: le o: In, De Arth	ed ear s, and r clos el Rio ur. Sp	ly mor bridge ed brid , San a	near 30 degrees, ning of Jan. 12 es. Major cities dges, and numerous Antonio, Corpus ce on bridges in
Bast Tennessee	Tueso	ing rain lay, Tra	ffic was The mi	s broug ddle po	ght to ortion	& CO	mplete	into halt.	Ice, freezing rain a skating rink Accidents were spared most of		car Pow	ed driv wreck er outs	ers. kille ges o	A 20-	car pil	le up t Merc oughou	inju edes it the	red ma e affe	ny in :	herous to unaccus- Brownsville; a 6- rea but were most and north of a line
Sast of Lawrenceburg, Lawrence County	A ca Rain area	s totalin creeks a	g arous	nd.2 in earms.	-water ches i	r brid had fa ridge	dge by allen l	fast i Friday Shoal (Heavy rains, flash flooding moving waters. night swelling Creek was crossed		from raid are as	m Bryan n fell. a were they cr	to F Ice- mainl	lousto lader ly res	n to Po trees sponsib power	ort And b and b le for lines	rthur Pranci the S. So	some hes in wides me los	3/4 to the h pread s to f	1 inch of freezing eavily forested loss of electricity ruit trees may have cold earlier on
41 TEXAS, Nort	rise esca some	n too hig pe, but t trees fo	h and the pass	the car senger	was a was dr ore be	swampe rowned eing i	ed. The	ne driv	a.m., the water had wer was able to er had to cling to scued.	south central Texas	Folor of race Del bri alt sno The	early J ed east Rio to ef dura hough o w did i southe	an. 1 ward San tion f 1 i all h rn ed	2, a over Anton from inch conceavilinge of the conceasing and the conc	nio to (mid-mon or less by along f the ho also)	riod a per ai l Texa Galves rning accum g a su eavy a	ifter ir di- as and ston a to m ulat- wath snow from	sturba d prod and no id-aft ion in throug (which : Mason	nce uced a rthware ernoon most h the exten to Bu	
											In tand and a mi cau: proc	ano, Bu William north Exture sed man	rnet, son C parts of sl y tre he fi	Willi o. so of t eet a iffic rst n	amson, me 150 the cour and snow accider measurat	Milam cars ity du prod its, e ole sn	were te to luced spec:	ezos, repor 6 inc a slu ially ll in	end Roll ted sta hes of sh on l in Hous San An	pertison Counties. randed in the west snow. Elsewhere nighways which storn. This storm tonio (% inch) in hd Corpus Christi.

	→ ∓ NO. OF ESTIMATED¹		1	,	T		NO. (F FCT	MATED	JANUARY 1
	NO. OF ESTIMATED DAMAGE FERSON DAMAGE CHARACTER			OCAL	PATH	H.	PERSO		MAGE	CHARACTER
PLACE	TIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD CROPS	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF	WIDTH OF PATH (YARDS)	KILLED	INJURED	CROPS	OF STORM
TEXAS,	Southern		IA		1	•				· · · · · · · · · · · · · · · · · · ·
south Texas	14 0 1 ? ? Unusuel Cold	Central Portions	19	Morning			0	0 0	0	Glaze
	A second surge of arctic air in less than 5 days gave unusually cold morning temperatures to all of south Texas Jan. 14. Although overall not so severe as the cold of Jan. 11, this hard freeze did penetrate farther south and affected agricultural areas of the Lower Rs Grande Valley. The duration		Free thre the a ha	zing rain ough the mountain: alf-inch	morning s eastw were co	. The r ard to mmon. I	esultir the Che In Covir	g glaze sapeake gton, wh	paralyz Bay. Ic ere acc	urs continued ed many areas fro e coatings of umulation reached n a decade.
	of lowest temperatures, however, was not enough to cause serious ctrus damage although sugar came and winter vegetables were hurt. In Houston a man was found in poor condition suffering from hypothermia after spending the night in an automobile. Some daily record lows set for Jan. 14 included these: Beaumont-Port Arthur 19 degrees F Corpus Christi 19	Northern Third	Snow ear incl	ly mornin	g hours common,	\dots and ϵ	ended be	with h	eaviest n. Amou	Snow : fall during the ints of 3 to 6 in western Princ
	Houston (Airport) 19 Victoria 20 Galveston 24 Brownsville 25	45 WASHINGT	ON							
	McAllen 29		L 16	1100PS	т		1	0 0	0	High Winds
a TEVAC W		Pierce Co.	A T	acoma man	drowne	ed when	his sa:		_	in a race
41 IEXAS, W	estern NONE REPORTED	Statewide	nor 23-2	th of Com	menceme -	ent Bay.	. 0	0 6	?	Heavy rains
		Statewide		m tempera	tures	eombine	•			-
42 UTAH ——43 VERMONT	NONE REPORTED		ris cau ing wes mud bec	es in riv sed exten ton mount tern part slides d ause of t	ers. A sive de ain pas s of th uring the	Avalanch amage, sses the ne state this per sures as	hes and All thi at link e were riod, re unkn	mudslide ree of the the east closed by The econo own. In	es also ne major tern and vavalar omic los terstate	Wash- l nches or sses 90
AREAWIDE	10,11, 0500- 12 2300EST 0 0 4 0 Cold		a d swe dum	r Snoqual ebris dam eping acr ped onto	that income the the	formed : e highwa ghway w	along O ay. So ere one	lallie C: me of the foot in	reek gar e roeks diamet	e way,
	Temperatures dropped from 10 to 25 below zero during the night-time hours and during the day never climbed above 9 degrees at reporting stations. Many Northern areas never got above 4 degree: above zero. Winds of 15 to 30 PMF with higher gusts, created wind chill factors of 50 to 60 below zero.		A woof or sta per run	debris waterfall the under more to r tewide we iod. Ros as high unts for komish Ri	twelve mined pepair, ere wash d repair as 1.4 the pe	feet war pavement Numero hed out irs in the million riod in the second s	ide cas t. It ous roa or dam Whatcom n dolla cluded	caded over will cost ds and braged duri County : rs. Lar B.8 inch	er the of \$200,000 this state of this state of this state of the state	edge 000 s ay nfall ne
44 VIRGINIA				9 inches			es as o	ючиатыт	: 1435	ano
Williamsburg, 8W	4 Afternoon 0 0 3 0 Wind Heavy showers and gusty winds moved through the area during the afternoon in advance of a cold front. This activity apparently idemolished the porch of an unoccupied summer house in the Chicka-	46 WEST VIRG	INI	Ą						
	hominy Haven community.	Ripley Buckner Bend Rd.	3 4	2100- 1350ES	т		1	0 0 0 0	0	Extreme Cold Extreme Cold
Statewide	9-12 3 20 5 0 Cold Strong surge of arctic air brought a deluge of calls for auto and plumbing service as water lines froze or burst and motor vehicles were unable to be started. Many low temperature records were broken, with readings in the single digits or below zero, especially on the morning of the lOth. The conservative estimate of cold-related injuries included two men of a party of 4 who were in a		nor	elderly thwester king lo	rn Wes	t Virg	ginia.	They s	lipped	sure, in and fell in a
	cabin cruiser that became mired in ice and sank in Occuquan Bay. Two other men, who jumped into the water to swim for help, disappeared and were presumed drowned in water that would have allowed only a short time for survival. In Caroline County a 47-year-old man was found in a yard near his home, apparently a victim of	Preston County	23 and 24	All Day	y		0	0 ?	0	Ice Storm
	hypothermia. Elsewhere, extreme cold froze hydrants in Lynchburg and made firemen's efforts to control a fire impossible. The home burned to the ground.			vy icin idents					cause	d 2000
Most of State	12- 13 0 0 Snow, Cold 13 Snowfall amounts of 4 to 8 inches were common over the western	Marlington	31	All Day	у		0	0 4	0	Ice Jam Flood
	two-thirds of the state. Snow began late on the 12th and continued to evening of the 13th. Mixed rain and sleet fell over the south-eastern portion. In Richmond, a 71-year-old nan was found dead in his unheated apartment.		cov	10 fami: ered so:	lies t me str	o be e eets a	evacua and ba	ted. A sements	foot o were	caused 8 f water flooded. house.
Most of State	14 0 0 0 0 Snow A new snowstorm followed on the heels of the above storm, beginning during the late morning over the west. and ending by midnight in the eastern counties. Amounts of 3 to 6 inches of snow were prevalent, with 6 to 10 inches reported in the east-central sections.	47 WISCONSII	N							
Statewide	16- 18 Another outbreak of severe cold followed one week after the previous surge, with effects nearly a repeat of the last spell. Again record low temperatures were observed: The -ll degrees on the 17th at Winchester was the coldest in 51 years of record; the 5 below zero reading at Charlottsville was the coldest this century. In Richmond, where the temperature dropped to 4 above, a 70-year-old man was found in his unheated residence. apparently another hypothermia victim. (The number of persons treated for cold-related injuries is again a conservative estimate.)	Southeast Half	3rd Temmy water of line about processour bout repo	1700CS yy snow di and ender peratures per-content 80 to 60 if es. Snow if the Crost theast ha ided by Mi orted the	eveloped by lawithing temperature withing temperature with temperature wit	ite morr i a few which, jused co ated 5" Ironwoo ot drift the stat Milwau est accu	ng the ening on degrees coupled on 16' to 16' od, Mich te and wikee, ar	the 4th. of free with ac ble dama south a igan. Se closed m irtually d Green ms with	zing pr company ge to t nd east vere dr any roa all ro Bay. Wa 16" at	Snow, Wind, and Blowing Snow oduced very high ing northeast wir rees and power of a line from ifting snow ds across the ads in the area shington County Germantown and

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	NO. OF ESTIMATED' PERSONS DAMAGE			OCAL	PATH	Ŧ.		OF SONS	ESTIMA DAM		CU-D-CTED
PLACE	TIME - LOCAL STANDARD - LOCAL LENGTH OF PATH WILLES WASHED CROPE RTY OF ROSES A GOOD AND AND AND AND AND AND AND AND AND AN	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
WISCON	SIN	48 WYOMING									
Statewide	7 0400- 2 0 0 Severe Cold	Casper, Natrona	05	AM&PM			0	4	4		Wind
Chanda	2400CST A major outbreak of cold artic air produced nighttime temperatures of -8° to -25° and wind chills down to -55° below zero. Two exposure deaths occurred in Reserve (Sawyer County) and in Merton Township (Maukesha County). 9- 2 0 5 0 Severe Cold, Snow.,	County, and I-80, Albany and Carbon Counties		outages broke wi winds in	to mos indows ijured	t of Ca and com at leas	sper merci t 4 p	for 3 al si eople	-1/2 ho gns wh . Inte	ours. ile del erstati	sing electrical High winds also oris hurled by e 80 between wind and blowing
Statewide	A major outbreak of bitterly cold arctic air produced minimum temperatures of -20° to -30°	Jackson, Teton County	05	AM&PM			0	0	?		Winter storm
	below coupled with sustained northwest winds up to 50 mpn. Wind chill readings ranged between -70° and -110° below statewide for a 20 hour period on the 10th. Three separate snow episodes produced a total new snow of 2 to 5 inches which, coupled with the low temperatures and high winds, resulted in severely drifted snow and low visibilities on the 9th and 10th.			snow and Monday.	avala The a 300MST	nche pr valanch from th	oblem e sli e Gro dowbr	s iso d ins s Vent ook C	lated of ide the tre But ondomin	lackson Town te and	ith snow, blowing n from the world of Jackson just d caused overflow
	About one-quarter of the state's roads became impassable. West winds on the 10th averaged 30 to 40 mph. Mukwonago, located in Naukesha County, measured a gust of 70 mph and sustained 50 mph winds during the morning and afternoon on the 10th. Temperatures	Chugwater to Wheatland, Platte County	08	PM High wir Chugwate			4 tr		along :		Wind tate 25 between n.
	of -25° below zero were recorded at Green Bay and Milwaukee on the morning of the loth. At Milwaukee, with 112 years of temperature	Yellowstone National	08	AM			0	0	4		Wind
Mukwonago, Waukesha	records, this tied the city's all-time low (recorded previously in 1875). Two exposure deaths occurred on the 10th in Salem (Kenosha County) and in Green Bay.	Park		main pow	ver lin k was d	e near owned a	Yanke bout	e Jim 0100	Canyon Friday	in t	area Friday. The ne northern end of ng power to
County	One man, disabled outside his home, froze to death in sub-zero weather.	Thermopolis, Hot	18	AM			0	0	3		Wind
Statewide	15- Severe Cold, Snow, 17 Wind, Blowing	Springs County		Winds es Owl Cree	stimate ek vici	d to 70 nity no	nph rthwe	rippe st of	d the Therm	roof f	rom a home in the
	Another bitterly cold air mass surged across Snow the state causing temperature records to tumble once again. Minimum temperatures between -25°	Gillette, Campbell County	24	1440MST			0	0	3	مدناه ا	Wind
	and -40° below zero were common. Mercer (Iron County) recorded -46° below zero on the morning of the 17th. Milwakee established a new all-time low with -26° below zero on the 17th. (The coldest ever in 112 years of temperature records.) Antigo (Langlade County) recorded -38° below and Marinette (Marinette County) had -30°, both are all-time low temperatures for the locations. 20 to 40 mph winds accommanied the sub-zero			area pro starting the Foot damage.	oducing a about	wind 9	usts unday Home	to 69 . The Park.	mph d e roof Othe	uring of a	ugh the Gillette a 10-minute period home blew off at s received minor Wind
North Half	temperatures and wind chills plunged to -100° below zero: Two separate periods of snow produced 1 to 3 inches of new snow which resulted in severe drifting. Many roads were closed. 20- 0900- Snow	Jackson, Teton County	24	AM&PM High wi Winds a and bey	t 10,40	cked Ja 00-foot	0 ckson Rende	(I Hole ezvous	0 closin Peak	g road indica	s and ski lifts. ted up to 120 mph
NOT CO. TO. IT	21 O400CST Low water-content snow fell across the north half of the state. Accumulations ranged from 6 to 18 inches north of a LaCrosse - Fond du Lac line. Heaviest accumulations occurred across St. Croix, Dunn, and Chippewa Counties where 12 to 18 inches fell.	49 ALASKA	,	·							
Statewide	22- 1 0 Blizzard North,	Kotzebue Sound	4-5				0	0	5	0	Blizzard
Statewide	An intense winter storm accompanied by heavy South precipitation and high winds swept across the state. Snow, mixed with sleet and freezing rain accumulated 7 to 20 inches across the north half of the state; and mixed snow, sleet and freezing rain accumulated 1 to 6 inches across the south half. Superior (Douglas County) reported 19" of snow and Eau Claire 10" of snow. Sleet and freezing rain produced	Arctic Slope	wind airp blow with 5-6	ls to 35 m lanes wer m off. Ti wind ch	mph and re flip here wa ills to	follow ped over s an ex 80 bel	ed by er and tende low.	west seve d per	winds ral ho iod of	of 40 uses h white	eceded by east to 60 mph. Three ad roofs partially but conditions
	plaze across southern Wisconsin with local glaze accumulations of 3/8" in Kenosha and Racine Counties. 25 to 50 mph winds produced blizzard conditions in northwestern Wisconsin north of Eau Claire. Minor tree damage due to glaze was reported in kenosha and Racine Counties. Virtually all highways from the Eau Claire area north to Lake Superior were closed on the 23rd.		to 8	5 below oped on th	over a ne Dalt operat	24 hour on High ions we	peri	od. or ab	A conv out 20	by of hours	and wind chill 31 trucks was . Aviation and roughout the
Madison, Dane	Temperatures plunged below zero statewide on the 24th, 25th, and 26th in the wake of the storm. One exposure death occurred in Kenosha on the 23rd. 27 PM 1 0 Severe Cold	South Coast	Vald	ez for o	ver 48	hours.	Wind	gust	s hit	1.00 mp	High Winds wept through h at the ong winds
County Statewide	A man froze to death in a van. 30- Drifting Snow	South Central	caus	ed delays	s in ta	nker tr					aldez. High Winds
	31 Southerly winds of 25 to 45 mph caused severe drifting snow. About one-fifth on the state's secondary roads	J	Stro	ng winds er report			he Ma	tanus	ka Val		r over 24 hours.
	became impassable.	50 HAWAII			_	- NÓ RE	PORT	REÇEÎ	VED		
		51 PUERTO RIG	co –			— NONE	REPO	RTED			
		52 VIRGIN ISL	ANI	os —		NONE	REP0	RTED			
		53 PACIFIC					PORT F	RECEIV	ÆD.		

LATE REPORTS

CORRECTIONS

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PLACE	DATE		TIME - LOCAL STANDARD	LENGTH OF P		KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM		PLACE	DATE	TIME - LOC	STANDARD	LENGTH OF P	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTI OF STORM
31 NORTH CA	Щ			<u> </u>	I	<u> </u>		<u> </u>	- 1	<u> </u>	J L	13 IOWA APRIL 1981	<u> -</u>	1		<u> </u>	1	<u>. </u>	1			
Coastal Sections of North Carolina	A s cau flo hit Bea and	p seve used oodi t wa ach d hi	I severe ng along is the ou in Pende gh waves	beach sect ter bi cr Cou from	erosions of anks fronty. 5 Kitty	n and the om Ki dwell Hawk	Some North tty Ha ings v to Na	coa Car awk were gs H	stationa stal olina co to Nags lost du lead with	Coastal Flooding and Beach Erosion ry ast. The hardest Head and Topsail e to high tides several other otel and five		DELETE: 2 TORNADOES ADD: 2 TORNADOES	Lour 5 M 3 M (pay	isa, 1 ile So	fusca outhw ist C	tine a est Di	rdsvill nd Scot xon to te, Sco	t Coι 1 Mil	ntie e No	s (pag irth De	e 6), litt t	and O
	hor pla	nes ace	were dan	naged (on Tops	ail B	eacl.	Sev		h erosion took		l Mile South Crawfordsville to Walcott, Washington, Louisa, Muscatine, and Scott Counties			CST	∿50 ng (Se	50- 100 veral 1	0 ivest	0 ock	5 killed		Tornado (F1)
SEPTEMBER 198	<u>1</u>		1930CST			0	0		? ?	Heavy Rain		5 Mile Southwest Dixon to 1 Mile North DeWitt to 3 Mile East Charlotte, Scott and Clinton	Mos	tly s	CST (ippi	ng. Se	50- 100 veral b lor dam	0 arns aged.	0 and	6 farm o	0 1t-	Tornado (F1)
	A 80 5	ver tati to ome	y locali onary ov 7:30 pm 6 inches	er pai CST. V along	rts of Within g the I	nse t south the 2 lano	hunden Mason houn River	rsto n Co r pe sou	rm remain . from riod rain th and so			Counties DELETE: ONE THUNDERSTORMS	in	East	Centr	al Iov	a and p	arts	of 1	W Illí	nois (page 6).
Mason Co. Gillespie Co. Kerr Co.	An sc se or	n al outh ever ne s rady att inor roun	torm cel in McCu ered wir scatter d Harper s accomp	ring coerstorm ll, afolloch ad dame red dame where banied ad high	old from cells ter cre Co., m age. In mages w they the st h wind	nt pr as i ating oved Gill ith m were corms gusts	unders oduced t move damas throus espie ost co estima throus	stor d se ed t ging gh n Co. once sted gh G	veral hrough th high win orthern l strong p ntrated to at 60 M illespie	Wind Wind Wind wind wind dese countles. nd gusts around Mason Co. causing gusts left wind gusts reported PH. Small hail Co. In Kerr Co. ainly over the		ADD: ONE THUNDERSTORM East Central lowa and parts of NW Illinois	3-4 Wid	220 010 espres)-)CST id wi	- nd dam	- mage to	0 trees	0 s and	6 I power	0 lines	Thunderstorm
Edwards Co. Edwards Co. Real Co. Banders Co. Kinney Co.	14 14 14 14 14 A ti 80 es In	lin lin lin stim Ki f th	1945CST 2000CST 2000CST 2010CST 2110CST are of severage these ficial where the severage these and the severage these are county amaging?	vere the country vind do scatto. the s	hunders ties pr amages ered lo severe Edwards a swath	0 0 0 0 storms oduce over catio storm Co.	d scal the and ns in s only the ho	ng s tter rea. eac y af igh	h of the fected the wind gus	ly f 60 MPH were counties. he northern part ts were followed size up to 1-3/4		MAY 1981 DELETE: ONE TORNADO, HAIL JUNE 1981 DELETE:	Nea			use, F in Ma	Robertso y.	ın Cou	inty	(page ·	16) oc	curred
Calhoun Co.	14 A th	sev he i b Ba nund	2015CST vere thur immediate iy. No si	ndersto coas ignific gusts	orm cel tline a cant da	0 1 dev ind wa mages	0 eloped ters (d st of S rep	? ? raddling an Anton- orted al	Wind		ONE TORNADO ADD: 2 TORNADOES	lis	nty (ted b	age elow:		e and no	rth (
Bexar Co.	A of	fun f th	understo	rms w	as spot	ted o	ver we	est		Funnel Cloud		New Johnsonville, Humphreys County	a ba	rn. derst	orna It i	s like	ly that had pro	this	tor	y dama; nado w	s pro	Tornado (F1) rees, a garden luced by the sa er in Madison a
Brazoria Co.	A th pa	sma nund		over	ing inl east Br	and f	rom th	he c	oast. It	Funnel Cloud		North of McEwen, Humphreys County	A sr tree from	0610 mall to swhe	CST orna n it same	? do cau touch thund	? sed min ed down	brie Whic	fly. h ha	to a :	torna	Tornado (F1) nd damaged seve io apparently c ornadoes in Mac
49 ALASKA																						
Yukon Delta	vi.	funr 11ag	ge of Ema	nonak	and was	visi	ble f	or l		Funnel Cloud torm near the minutes. A d.												

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	-	10	RNAD	OES .	<u> </u>		HAILS	T	MAGE		WINDS	Γ-	S MAGE			†DAN			Γ	†DAN	_	A	ND BLI	IZZAF	DS MAGE	F		†DAN	_	·		1DAM	_
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STORM SUMMARY

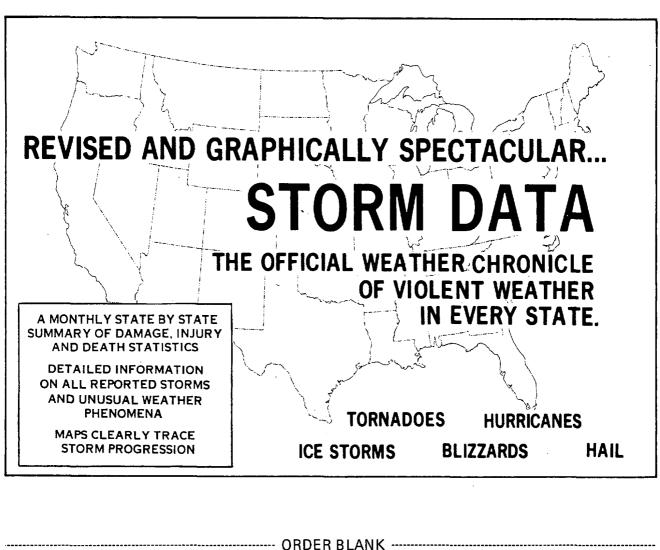
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Correction	MAY	1981																											_
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North Carolina							ļ					ļ				ļ	ļ						1	ļ				5	

REFERENCE NOTES

t	Stor	n damage categories are from	*	Miles instead of yards
	1 to	9 as follows:	**	Yards instead of miles
	1	Less than \$50	0	Includes crop damage
	2	\$50 to \$500	@	Includes heavy sleet storm
	3	\$500 to \$5,000	#	Freezing drizzle and freezing
	4	\$5,000 to \$50,000		rain, commonly known as glaze
	5 -	\$50,000 to \$500,000	#	Not received or incomplete
	6	\$500,000 to \$5 Million		
	7	\$5 Million to \$50 Million		
	8 -	\$50 Million to \$500 Million		
	9	\$500 Million to \$5 Billion		

"F" SCALE DEFINITIONS

0	=	40-72	MPH	Breaks branches off trees; signboards damaged.
1	=	73-112	MPH	Peels surface off roofs; trailer houses pushed or damaged.
2	=	113-157	MPH	Tears roofs off frame houses and outbuildings; cars blown
				off highway.
3	=	158-206	MPH	Windows of skyscrapers smashed; frame houses destroyed;
				cars lifted off ground.
4	= '	207-260	MPH	Skyscrapers twisted; frame houses leveled; cars blown
				some distance.
5	=	261-	MPH	or greater.



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